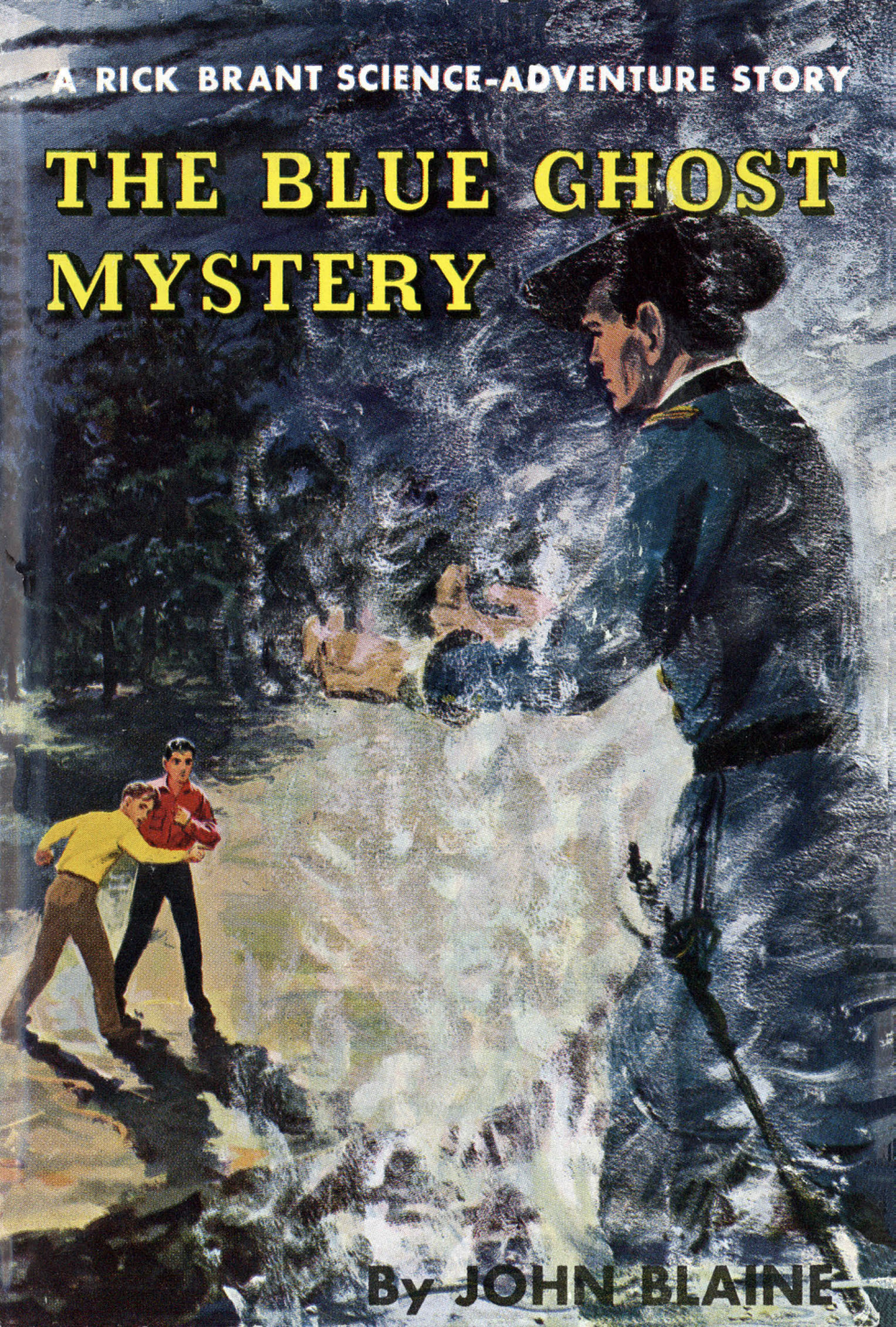
A RICK BRANT SCIENCE-ADVENTURE STORY

THE BLUE GHOST MYSTERY



By JOHN BLAINE

THE BLUE GHOST MYSTERY

By JOHN BLAINE

A SHIMMERING GHOST walks by night with his spectral henchmen in the shadow of an old deserted lead mine. Is it the phantom ghost of a Union captain killed so long ago in the days of the Civil War — or is it a fraud?

At the urgent request of his sister Barby, Rick Brant and his sidekick Scotty fly down to the sleepy Virginia town from the Spindrift Scientific Foundation to see for themselves the eerie apparition at Old Mine Campground.

The clues to the baffling mystery are few. Discovery of a carefully hidden radioactive cement bag, the strange death of a "mob" of microscopic creatures, and the suspicious actions of the Frostola man are all the leads that Rick and Scotty have to go on. Yet each clue to the true identity of the Blue Ghost draws Rick and Scotty inevitably closer to the hidden secrets of the old deserted mine shaft.

A microscope, a hastily rigged radio set, and Rick's pocket lens help Rick and Scotty to solve the riddle of the reappearing phantom — but not before the two young scientists more than once meet danger at the hands of the Blue Ghost of Old Mine Campground.

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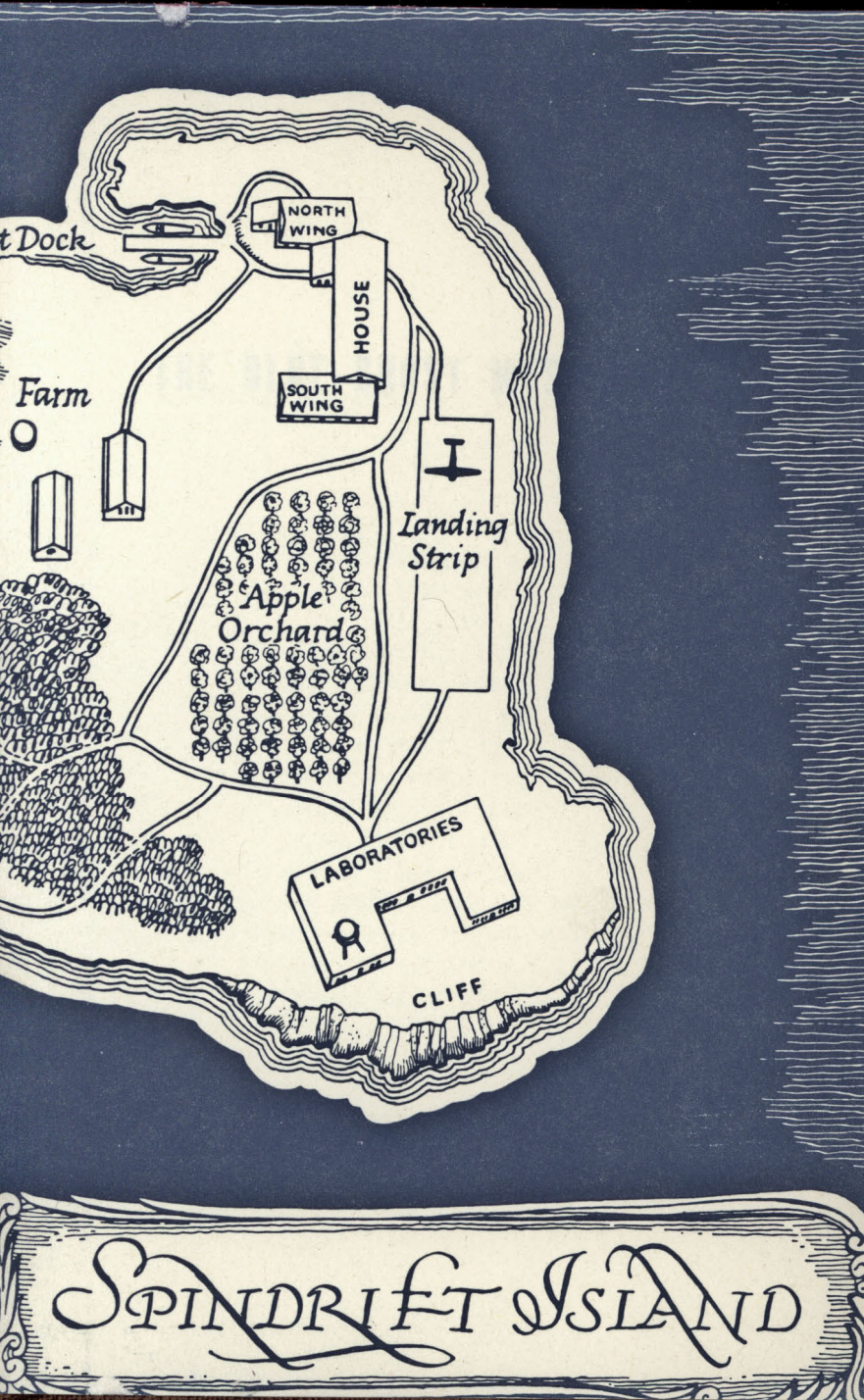
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Farm
NORTH WING
HOUSE
SOUTH WING
Landing Strip
Apple Orchard
LABORATORIES
CLIFF
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THE BLUE GHOST MYSTERY

THE BLUE GHOST MYSTERY

CHAPTER I

A Spooky Invitation

RICK BRANT moved with infinite care. With one hand he adjusted the focus of his microscope, while with the other he brought the sharp glass tip of the pipette into view. He released his thumb for a fraction of a second and let a drop of blue fluid flow into the field of view.

The microscopic monster shot out its defensive weapons, shuddered, and was still. For a moment Rick inspected his work, then sat back with a sigh. Staining microscopic animals was delicate work, but this specimen had turned out perfectly. At the instant the stain hit the animal, it had shot out its trichocysts, or stinging hairs. Rick hoped they would photograph. He needed a good picture for the science project on which he was working.

To rest his eyes he turned in his chair and looked out over the broad horizon of the Atlantic Ocean. It was a calm day, and the calmness was reflected in the leisurely pace of life on Spindrift Island. The famous island off the New Jersey coast, home of the

Spindrift Scientific Foundation, had not always been so peaceful, Rick thought. Many scientific experiments of world importance had taken place, or had begun, in the long, low, gray laboratory buildings on the southeast corner of the island.

Most recently, Rick Brant and his pal Donald Scott, nicknamed Scotty, had taken part in an expedition to the Sulu Sea. The quiet, scientific survey of human and animal life in the area had begun on Spindrift Island, but had ended in a bloody fight on another island, in a far corner of the globe, as told in *The Pirates of Shan.*

Now, though, all was serene. The scientists were at work on reports, or teaching summer sessions at universities. No major experiments were in progress, and no expeditions were being planned.

Rick grinned. If he came right down to it, one reason for the peace and quiet was the absence of his sister Barbara. Barby, a year his junior, was visiting with the Millers, one of the island's scientific families, at their ancestral home in Virginia. Barby and Jan Miller had a way of making life somewhat frenzied, or at least less quiet than at present.

The sound of a fast-moving motorboat intruded on the quiet and Rick cocked an ear. It was one of the Spindrift boats, judging by the sound. That meant Scotty was returning from the mainland with the groceries and the mail.

Rick stood up and stretched luxuriously. He decided to walk down to the cove and meet Scotty. He could help carry the groceries. Besides, he hoped that

Scotty would have a package for him from a biological supply house.

Rick's interest in microscopy had begun with Barby's present of a complete microscope set. It was a beauty, with magnifications up to three hundred times. It had its own light source, a substage illuminator, and even an "atomic energy" stage, which was actually a device for viewing the scintillations caused when radioactivity hit a sulfide screen.

Barby's gift was far more than a toy, and Rick promptly put it to work on a science project, in which he planned to compare the life cycles of two common microscopic animals, the paramecium and the rotifer. His laboratory was a table on the front porch of the big Brant house on Spindrift Island, because the ocean breeze made it a comfortable place to work, and because Barby's absence meant the porch wasn't cluttered with half the female population of Whiteside High School.

As Rick came within sight of the cove, Scotty was already docking. The husky ex-Marine threw a hitch over the dock cleat and jumped to the pier, waving excitedly as he saw Rick.

"Hey! Wait until you see what I have!"

Rick let his long legs carry him swiftly to meet the other boy. When Scotty got excited, something unusual was up. He called, "What is it?"

Scotty yelled, "We're going ghost hunting!"

Rick stopped in his tracks. He waited until Scotty was within normal voice range. "Come on into the house," he invited. "We'll get you some aspirin and

put a wet towel on your head. The sun's got you, that's all."

The dark-haired boy shook his head vehemently. "Don't jump at conclusions in this heat, brother Brant. You'll get overheated. Just listen to what's in this letter."

Rick squinted against the glare. "Who's it from?"

"Barby and Jan."

Rick groaned. "Don't you know Barby's been gone on ghosts ever since she started watching that TV program on Sunday nights?"

"This is different," Scotty insisted. "But since you're such a skeptic, you can wait until we've hauled in the food. Come on, scientist. And unless you keep an open mind until you hear the evidence, we'll take your Junior Experimenter badge away."

Rick had to grin. There was justice in his pal's comment. "Okay, we'll play it your way. But the evidence had better be good!"

Mrs. Brant was in the kitchen when the boys arrived with the bags of groceries Scotty had brought. She recognized her daughter's handwriting immediately and pointed to the letter sticking out of Scotty's shirt pocket. "What's the news in Virginia?"

"Barby found a haunted house," Rick said with a grin. "Scotty's all excited."

"He's handing out bum dope, as usual," Scotty added. "He hasn't even read the letter." He grinned widely. "But I have. And he'll eat his words before we're through."

Rick fielded a can of tomatoes Scotty tossed at

him and put it on the canned-goods shelf. "Never had indigestion from eating my words yet."

"This time," Scotty said happily, "we'll paint them on an oak plank before you start eating."

Mrs. Brant smiled. "Hurry up and get those bundles unpacked, you two. I want to hear about this mysterious business."

In a short time the three of them had stowed the week's supply of food, and Mrs. Brant produced fresh doughnuts and cold milk.

"Now," she said, "suppose you read the letter, Scotty."

Dr. Hartson Brant, Rick's dad and head of the island scientific foundation, came into the kitchen in time to hear the last remark. "Can I listen too?" he asked. "With milk and doughnuts to help, of course."

Rick personally poured the milk for his father and added doughnuts to the plate, just to save time. He couldn't admit it to Scotty, of course, but he was plenty curious in spite of his skepticism. He knew Scotty, and his pal wouldn't get excited over some silly business that Barby might write about.

Scotty produced the letter. "It's addressed to both Rick and me," he began, "and it's from both Barby and Jan. Shall I read?"

"Go on," Rick said impatiently, and had to bear Scotty's knowing grin. Scotty knew that Rick's bump of curiosity was the largest thing he owned.

"Okay. It starts with 'Dear Rick and Scotty.'"

"Interesting," Rick said. "Unusual."

"Uh-uh. Quiet, please. It goes on, 'You must come

at once, both of you, because we have a ghost here. I know Rick will think I'm silly, but it's true.' And Jan put in a sentence in her own handwriting at this point that says, 'Barby is right. It's not only true, it's unbelievable.' "

Scotty continued. " 'We heard about the ghost first thing we arrived, from Mr. Belsely, the Millers' tenant farmer. Of course we didn't believe it, but last night we went to a picnic at the Old Mine Campground, and we saw it too! Honestly, we're still both lumpy with goose pimples. It was just ghastly, but it was kind of romantic, too. If Dr. and Mrs. Miller hadn't been along, I don't think we'd have believed we had really experienced such a thing. But they saw it, too, and Dr. Miller says he has never heard of anything like it.' "

Rick waited for more, scarcely breathing for fear of missing a word.

" 'So you had better come right away,' " Scotty read on. " 'You can fly down and land right at the Millers'. We have shown on the map where to land, and we will put out white towels to make a panel so you can see us from the air. Please hurry. Barby and Jan."

"Sounds pretty urgent," Hartson Brant said with interest. "Anything else?"

"Yes, sir. There's a postscript from Dr. Miller. He says, 'The girls were pretty excited when they wrote the above, and with excellent reason. Apparently this apparition appears fairly often. A number of townfolk have seen it. I don't know what you can do, un-

less your ingenuity can produce a super spook catcher, but you will enjoy tackling this problem. It is worthy of your best effort. Mrs. Miller and I heartily endorse the girls' invitation."

Rick took a deep breath. "I'll eat my words," he agreed. "Even if you inscribe them in deathless bronze, as the poet says. How about that, Dad? Dr. Miller isn't the excitable type, but he was pretty strong in his statements."

The scientist, who looked like an older version of his tall son, nodded agreement and stoked his pipe thoughtfully. "The letter was obviously written in haste, because neither the girls nor Walter took time for a description. What about it? Think you'll go?"

Scotty spoke emphatically. "I'm going. But I'm not sure Rick can get his nose out of that microscope."

"No need," Rick said, grinning. "I'll just take it with me. Besides, I might pick up a new species or two in Virginia."

Scotty sighed. "Ever since you got that mike from Barby we've seen practically nothing of you but the top of your head."

Rick's mother spoke up. "I agree with Scotty, Rick. I know how anxious you are to do a good job on your project, but you've been at it for weeks now. Your eyes need a rest even if the rest of you doesn't."

"Don't worry, Mom," Rick said. "After that endorsement from Dr. Miller, chains couldn't keep me from going to Virginia. After all, what's a collection of microscopic animals compared to a genuine, one hundred per cent dyed-in-the-ectoplasm spook?"

CHAPTER II

Death at Costin's Creek

SCOTTY checked the map and examined the terrain below. "That's Manassas," he confirmed. "Swing to the south now, on a bearing of 183 degrees."

Rick banked the Sky Wagon onto a new course, then settled down to locate the landmarks Barby and Jan had noted on the road map enclosed with their letter.

The Sky Wagon had, until recently, been equipped with pontoons for water landing. Rick had outfitted it originally for a skin-diving trip to the Virgin Islands, an adventure now known as *The Wailing Octopus.* The pontoons were so useful that he had left them on, until his new science project had made it necessary to go back and forth between Newark and the island for consultation with a laboratory in the city. He was glad now that he had changed back to wheels. It had made it possible for him and Scotty to leave the morning after Barby's urgent letter arrived.

The four-seater plane was actually Rick's second. The first, his beloved Cub, had been bought and paid

for by his own efforts, serving as taxi for the scientists and as the island's shopping service. When the Cub was wrecked, as described in *Stairway to Danger*, the reward for capture of a criminal and his loot had made it possible to buy a larger and more powerful plane.

Rick consulted his watch. "We must be pretty nearly there."

"We are," Scotty confirmed. He consulted the map again. "There's the cluster of buildings on top of the mountain Barby circled. It's either a weather station or a radar installation. Start losing altitude after we go over it. The town of Lansdale should be in sight by then."

Scotty's navigation proved excellent as usual. Shortly after passing the mountaintop Rick saw the town, obviously a very small one, and immediately swung slightly north again. The glint of water caught his eye and he said excitedly, "There's Costin's Creek. It has to be. No other water in sight."

He lost altitude rapidly, finally leveling off a thousand feet above the creek. Scotty, peering ahead, saw the ground signal first. "There's the panel of white towels, ahead and to the right, on my side. Swing and you'll see it."

Rick did so. He spotted the panel at once, with four figures standing next to it. In a moment they were in plain sight, waving as the plane passed overhead. Rick did a wing over that took the plane back over the area. This time he watched the terrain carefully, while Scotty did the same.

"Looks good," Rick said. "See any rough spots?"

"Nope. It's a hayfield, fresh cut, from the looks of it. Should be okay. The leaves on the trees across the creek aren't moving, so wind shouldn't be a problem."

"Okay. Here we go." Rick turned into his landing pattern, losing altitude rapidly. The field was a big one, so he had plenty of room. In a moment the Sky Wagon touched down, bumping only a little as it rolled across the field. He taxied to where the girls and the Millers were waiting, and killed the engine.

Barby and Jan were up on the wing before the boys had a chance even to unbuckle seat belts. Both girls were obviously excited, and both started to talk the moment Rick opened the cabin door.

He looked from one to the other trying to make sense out of the stream of words. Barby's blue eyes sparkled, as did Jan's brown ones. Both were intent on having their say, and as a result, the boys understood neither.

Not until hands had been shaken all around did the excited chatter of the girls begin to make sense. Apparently the very field where the boys had just landed was haunted. The ghost had walked this ground on more than one occasion, the latest being last night, with dogs howling and men running from the ghostly sight.

Dr. Miller finally quieted the two down. "Let's tell our tale in good order, or we'll simply confuse our visiting detectives. Come on, boys. Let's go to the house. We have some lunch waiting."

The boys collected their bags, then set up the plane's alarm system. It consisted of an electrified fence that would set off a loud klaxon horn if touched. The plane itself would also trigger the alarm if touched. The alarm could be stopped only by inserting the key in the locked door.

As the group walked from the plane to the Miller house, Rick checked his impressions with the view from the air. The house, and the field on which he had landed, were on the north side of the creek. A half mile below the house, the dirt road leading to the Miller farm crossed the creek on an old military Bailey bridge. Across the creek the road vanished into a forest that came right down to the creek's edge.

Rick knew from his overhead view that the forest was only a hundred yards wide along the creek. Beyond it were more fields, interspersed with patches of trees and a few uncultivated areas that were too rocky for farming.

It was a lovely countryside, and Rick enjoyed it. The Miller house was in an orchard on which a bumper crop of Virginia apples already was in evidence.

The house itself had once been a large farmhouse. The Millers had remodeled it, keeping the charm of the old while adding the convenience of the new. Rick felt at home right away, and he saw that Scotty did, too.

Over an excellent lunch of charcoal-broiled hamburgers, salad, and iced tea, Dr. Miller asked, "Who's going to tell the tale?"

Both girls started talking at once. Mrs. Miller, an attractive, stylish woman, raised her hands. "Please! Jan, suppose you start with the history of the ghost. Then, Barby, you take over and tell what we saw the other night."

"All right, Mother," Jan began. "The ghost isn't new, you see. We've had a blue ghost here for centuries!"

Rick's eyebrows went up. "A *blue* ghost?"

"Yes. You'll see why in a moment. Anyway, we all knew about the ghost, sort of, and some people were supposed to have seen it. Only it was the kind of story where you never met anyone who had actually seen the ghost. There were only people who knew people who knew people who had seen the ghost. If you follow me?"

Rick grinned. "We do."

Jan's dark eyes sparkled. "Then, just before we came down from Spindrift, over a hundred people saw the ghost, and it was just as the legend tells."

Scotty asked, "So this isn't just any old ghost, it's a legendary one?"

Jan nodded. "We even know its name. It's Seth Costin. He's the one that the creek was named for. But I'm getting ahead of myself. You see, this region was a battleground in the Civil War. Mosby's Raiders spent a lot of time around here. Well, when the war turned against the South, a squadron of Union cavalry came down under Captain Seth Costin, and they got into a battle with some of Jeb Stuart's men right in our orchard and field. They fought up and

down the creek, with the South trying to keep the Union from crossing. Finally, Captain Costin crossed, but the creek was red with blood, the story goes."

"A real gory legend," Scotty murmured.

Both Jan and Barby glared at him. "Sorry," he muttered contritely.

"It's a very romantic story," Barby said tartly.

Rick and the Millers suppressed smiles.

"Anyway," Jan went on, "the creek has been known as Costin's Creek ever since. Well, Captain Costin quartered his men in the town. You know how it was. He stayed at the home of Squire Lansdale, who was by then a Confederate general. The squire had a daughter, whose name was Ellen, and she was perfectly beautiful. The squire also had two sons, who were a little too young for joining the Army, but not too young to cause trouble."

Rick could see where the story led. He asked, "Was Captain Costin a handsome young man, by any chance?"

"He most certainly was," Jan said emphatically. "He was terribly romantic. Wait until you see him."

Rick could hardly wait, but he didn't comment.

"Of course the captain and Ellen fell in love."

Rick could imagine.

"But along came Jeb Stuart's whole cavalry and they pushed Captain Costin's squadron all the way back to Manassas, and then they occupied the area. But Captain Costin couldn't stand not seeing his Ellen, so he somehow got a message to her, to meet him at the mine."

It was the first Rick had heard of a mine. He asked, "Can I ask a question? Where is this mine and what kind is it?"

"The mine is right across the creek, just beyond the bridge," Jan explained. "We could see it from here if the trees weren't there. Anyway, it's where the town picnic ground is located now, on our property, partly. It used to be a lead mine, and during the Civil War a lot of Southern bullets came from there."

From Jan's tone of voice, Rick suspected that her sympathies were with the lost Southern cause, which was natural enough, since her ancestry was pure Virginian for several generations.

"The mine wasn't worked on Sunday, in those days, and Captain Costin asked Ellen to meet him on a Sunday night at nine o'clock. Well, the Lansdale boys somehow found out where their sister was going, and they went, too. And they shot down Captain Costin in cold blood, right at the mine entrance. Just when he was holding out his arms to greet his sweetheart!"

Jan obviously didn't like this part of the legend, Rick thought.

"So that's how the ghost began," Jan concluded. "After making his way through practically the whole Confederate cavalry, he was shot down at our mine before he could even say hello to her! No wonder he haunts the place!"

"How about all the soldiers killed in the fighting?" Scotty asked, straight-faced. "Don't they haunt the place, too?"

"We've heard that some people have seen more than one ghost," Jan said, "but we don't credit secondhand stories much. We only saw the captain."

Rick must have looked pretty incredulous, he suspected, because Barby gave him an accusing glance and stated flatly, "And we did see the captain, Rick Brant! Didn't we?"

The Millers all nodded. "Tell them," Mrs. Miller suggested.

Barby picked up the tale. "We were all invited to a cook-out the other night. It was given by the Lansdale Garden Club and Mrs. Miller is a member. I guess it's planned long in advance, so they couldn't call it off or go somewhere else, so it was held. There must have been at least fifty people there."

Rick made a mental note to ask for elaboration of Barby's statement about canceling the event or holding it somewhere else.

"The barbecue pits are close to the old mine entrance, where the ghost always appears because that's where the captain was shot. Anyway, everything went well until nearly nine, and that was when we all began to get nervous."

Shot at nine, reappears at nine, Rick guessed. Strange ghost. Usually apparitions are supposed to appear at midnight.

"I didn't really expect anything," Barby went on, "because who believes in ghosts anyway?" She shuddered. "At least I didn't then. But at nine someone let out a scream, and we looked, and there was a white mist rising above the mine, and then the Blue

Ghost appeared right in the mist, and it was awful." She ran out of breath and paused.

"It really was," Mrs. Miller said quietly. "Go on, Barby."

"Well, the ghost was a handsome young officer in a blue uniform, the Civil War kind. And he held out his hands, and he looked so . . . so appealing. And then he suddenly put his hands on his chest, and when he pulled them away they were all . . . all bloody."

Barby gulped. Rick shot a quick glance at the Millers. They were nodding. So all had seen the same thing, then.

"Anyway, he faded away then, and only the white mist was left. But honestly, it was . . . well, it was so real! And the whole thing was blue, sort of, except for the . . . the blood. That was red." Barby finished whitely, "It kind of broke up the picnic."

Rick could imagine. Great galloping ghouls! What had happened? He couldn't believe the ghost was real, but Barby and the Millers were obviously convinced.

"Incredible," Scotty muttered. "That's some yarn!"

Rick agreed. "I want to see this Blue Ghost," he stated.

Dr. Miller smiled. "You both look rather doubting. I must admit that I don't believe in ghosts. My entire scientific training rejects the explanation. But let me assure you, we saw a genuine apparition just as Barby described it, and I can offer no reasonable hypothesis. I have thoroughly inspected the area, and

there is no physical evidence I have been able to see."

Rick digested this statement. His first thought, of course, had been that the ghost was somehow man-made. He still didn't reject the idea, but Dr. Miller's comments made it clear that the source of the ghost at least wasn't obvious.

"When do we see this ghost?" Rick asked.

Dr. Miller replied, "How about tonight?"

A sudden chill of premonition wormed its icy way up Rick's spine. "That will be fine," he said shakily.

CHAPTER III

The Blue Ghost

Rick, Scotty, Barby, Jan, and the Millers walked leisurely along the slow-moving creek, down the dirt road to the old Bailey bridge. They passed the Sky Wagon and its protecting alarm system, and Rick wondered humorously to himself if the alarm would warn of spirits or only of humans.

The sun had set only minutes before and the sky was still tinged with red. Rick noted that the waters of the creek picked up the color, and for a moment his active imagination peopled the empty fields with blue and gray cavalrymen locked in mortal combat. He could almost hear the thunder of hoofs, the excited neighing of the mounts, even the solid sound of a heavy saber meeting yielding flesh. He shivered. After all, it had been like that for a brief period many years ago.

Scotty moved to his side. "This is the oddest ghost-hunting expedition I've ever been on. No equipment but a flashlight. Not even an electronic spook spotter."

Rick nodded agreement. "Too true. But any experi-

enced ghost grabber knows that you can catch a sackful with only a flashlight and a pair of shoestrings."

"Why the shoestrings?"

"You tie their ectoplasm together top and bottom and they're trapped in it. Like a burlap bag."

The boys had been bringing up the rear of the little procession and the others had not heard the soft-spoken exchange. Rick was just as glad. Weak jokes somehow didn't fit. It was the very lack of preparation, the simple walk after dinner to see the ghost, that made it all somehow very convincing. The Millers, both quiet people, were never much at small talk, but both girls were chatterers. Yet, even the girls were quiet.

"They *know*," Rick thought. "They know what we're going to see. They're awed and a little frightened, but they're leading us to it, even knowing how it will be. Scotty and I are the ignorant ones. The others feel the weirdness and we don't."

He lengthened his stride and joined the Millers. "Sir, how can you be so sure we'll see the apparition tonight?"

"One can't be sure, of course. But so far as we have heard, the apparition hasn't missed a public gathering in a month. There will be one tonight, a service-club outing from over in Manassas."

"They must not be afraid of the ghost," Rick commented.

"They may not have heard of it," Mrs. Miller explained. "I don't believe any newspaper has carried

a story, so word of mouth would be the only way of knowing."

"Or perhaps they have heard but couldn't cancel it," Dr. Miller added. "That's the case with most of the affairs now being held at the grounds. A great number have been called off. Only those scheduled far in advance with lots of guests are still going on, simply because it's too difficult to change them."

Scotty asked, "Then the ghost is having an effect?"

"Definitely. At this time of year the grounds are usually one of the most popular places around. Families come for cook-outs, and the kids swim in the creek. Clubs hold their outings almost every night, sometimes two or three groups at once. But since the ghost came people are staying away, except for the affairs that would be difficult or awkward to cancel or change."

That was what Barby had meant, Rick thought. He asked, "Is this a public park of some kind?"

"No indeed," Dr. Miller answered. "We own part of it, and a family named Hilleboe owns part. But it's not used for anything and we've never objected to the public using it. The local Boy Scout troops have taken on the job of keeping it clean as a regular project, and most people are careful. It's no trouble for us."

Rick glanced at his watch. It was getting dark rapidly now, and the apparition was due in fifteen minutes. The bridge was just ahead. They were in plenty of time.

"Strange," he thought. "The ghost of Captain Seth

Costin, late of the Union Army, probably the Army of the Potomac, will perform for all comers promptly at nine. 'We regret there can only be one performance each evening.' Or was that true? Had anyone stayed to see? Maybe the obliging phantom performed every hour on the hour during darkness."

He shook his head as though to clear it of cobwebs. This didn't check with any ghost story he had ever heard. No holding hands around a table, no incantations or strange phrases in forgotten languages, no incense, no nothing. It was bum theater.

The group crossed the bridge and entered the trees, still following the dirt road. Rick saw that the road forked, one branch going to town, the other to the picnic area. The trees around them were huge oaks, and almost certainly most of them had been healthy and along in years when Seth Costin fought among them.

Rick enjoyed the feeling of history, of a definite past. He resolved to do a little reading on the area.

Barby and Jan, who had been walking boldly in the van, dropped back now and the group seemed to huddle more closely together. There were voices among the trees, and here and there the glow of a fire. Then the edge of the tree belt was reached and the group stopped.

There was a clearing beyond the tree belt, and in the clearing were rough-hewn tables and benches. Beyond the clearing a grassy hill rose gently to an upland meadow, except for a section that rose sharply for nearly a hundred feet.

The upthrusting section was barren of grass, and at its base, boards were nailed across what was obviously the opening into the mine.

"Interesting formation, isn't it?" Dr. Miller asked.

It definitely was, and Rick said so. Even to his relatively untrained eye, this was a place where a volcanic fissure had opened ages ago, allowing igneous rock to thrust sharply upward through the sedimentary layers of the older ground. Now the formation had weathered until it was like a barren hill built on top of a fertile one. On the steep slope of igneous rock no grass had managed to get hold, although a few hardy weeds clung to it.

Barby pointed to a shelf, actually a terrace in the rock structure, above and a few yards to the left of the mine entrance. "He appears there," she said.

"Let's get a good position," Rick urged. "It's almost nine."

The sky was still blue in color, but it was already dark on the ground. Fires flared up brightly, but the picnickers were hushed, as though they knew what was coming. They probably had not seen the ghost, and it was likely few believed they would see anything, but the unknown casts a strong web, and they were feeling its effects.

The Spindrifters moved along through groups of picnickers until they were directly opposite the old mine shaft, and took up positions in the shelter of an oak tree.

"There's a pool of water on top of that shelf," Dr. Miller told the boys. "It's from a spring, actually an

artesian well. There's a pipe outlet up there from which water flows constantly. It collects in the pool, which overflows into a natural drainage ditch."

The scientist pointed to where the tiny stream made its way down the hillside and disappeared among the trees. "Over the years it has cut a natural channel to the creek. So far as anyone can remember, it has always been here. The pipe was replaced a few years ago, apparently by driving a new one into the hillside. The original well probably was driven during the Civil War."

Rick examined the terrain. "Odd, water coming out of a hillside like that, especially when the hillside isn't part of a mountain."

"The water comes off the Blue Ridge, and it develops a pretty good head of pressure in its underground channels. Whoever drove the original well simply tapped that hydrostatic head, although why they didn't drive the well at this level is beyond me."

A sudden scream from nearby brought the conversation to an abrupt end. Rick turned in time to see a spout of water vapor, or something that made a white cloud, rise from the place where Dr. Miller had said the pool was located.

Rick felt a chill run through him and the short hairs on the nape of his neck bristled in a reaction older than the race of man. "You've got to keep calm," he warned himself sternly. "Be objective. Don't miss a thing!"

Scotty let out a low whistle, and Rick suddenly felt Barby's fingers biting into his arm. For, through the

white rising mist, there came an officer in Union blue, and from under the broad cavalry hatbrim, piercing eyes looked straight at them.

Rick swallowed hard. He was vaguely aware of the terrified scurry around him as most of the picnickers departed as fast as their legs would carry them.

The apparition extended hands, as though in welcome to a loved one. The youthful, handsome face smiled.

Rick shook his head to clear it. This couldn't be happening! The apparition was faintly blurred, as though by the writhing of the mists in which he appeared, but details were clear enough. Rick could see the smile vanish suddenly, and shock replace it. He could see the gauntleted hands suddenly clasped to the chest, see red spurt from between the gloved fingers.

Jan Miller let out a long-drawn, soft, shuddering sound from between clenched teeth. Barby's fingers clamped tighter on her brother's arm.

Rick fought to shake off the feeling of horror and dread. "There aren't any ghosts," he tried to tell himself. "This isn't a ghost. There are no ghosts."

Except that he was looking at one!

The apparition began to fade, holding out bloody hands. The phantom officer swayed a little, and the young face was distorted with agony. It grew dimmer and dimmer until only the white mist remained.

Rick was aware of Barby's soft sobs next to him, but his eyes remained riveted on the white mist.

A yell from Scotty snapped him out of his reverie.

There was no place the Blue Ghost could have gone

"Let's go, boy!"

Without quite knowing how it happened, Rick found himself next to his pal, climbing frantically up the rocky slope to the shelf, hurrying to catch the Blue Ghost before even the mist vanished!

Not even bothering to draw themselves to an upright position, the boys flung themselves forward into the rapidly vanishing mist. Rick felt with horror a thin, icy tendril curl around his face, and he heard a gentle bubbling sound, like phantom laughter.

Scotty's flashlight probed with a bright yellow beam, and Rick saw, in the instant before the mist vanished and all movement ceased, that the surface of the pool boiled gently and then was quiet.

The flashlight beam disclosed solid rock, broken only by the pipe from which water trickled.

There was no ghost.

There was no place he could have gone.

There was no sign of human handiwork.

There was—nothing.

CHAPTER IV

The Old Mine

Rick, Scotty, and the two girls stood in silence and surveyed the scene before them. They stood on the brow of the hill, looking down at the picnic ground, at the trees under which they had stood and watched a hair-raising apparition the night before.

Even in daylight the place somehow seemed eerie to Rick. The sun was shining brightly and birds came and went without fear or interference on their normal business of gathering food. A slight breeze ruffled the foliage of the oak trees.

It was a fine, normal Virginia summer day, with no trace of the supernormal or weird about it. Yet, Rick felt somewhat less than relaxed, and he certainly felt puzzled.

Directly below them the pool created by the flow of spring water glistened in the sunlight. Between their feet and the pool was solid rock, with only a few weeds struggling for life in an occasional crack.

"This is going to be a tough nut to crack," Rick stated. "Look at that rock wall. Obviously, we'd have seen anything living that tried to climb down it, even

in the darkness. If anyone had been standing up here, he'd have been silhouetted against the sky."

"There was no one on the hill last night," Scotty said positively. "I looked at every inch of it."

Barby listened to the exchange with an exasperated expression on her face. "Can't you two believe the evidence of your own eyes? The Blue Ghost appeared right under where we're standing. You can see for yourselves that nothing could be hidden by anyone to make a ghost appear. Besides, it was too real to be a trick."

"It was a ghost," Jan Miller said with quiet conviction. "Everyone has always known there was a ghost here."

Scotty shook his head. "Everyone has always known there were ghosts in a hundred places, if you want to consider all the folklore about spooks. A few people have even claimed to have seen one. But who ever heard of a haunt that put on nightly performances?"

"You have now," Barby said flatly.

"Maybe," Rick said. He didn't know why he was still skeptical. The apparition had been really bloodcurdling in its apparent realness, but he still wasn't ready to buy a supernatural explanation.

Jan Miller replied with an appropriate quote from William Shakespeare. "There are more things in heaven and on earth than are dreamed of in thy philosophy, Horatio Brant!"

Rick grinned. "That's true. No one knows better than I how ignorant I am. I can only say that I'm

trying to learn. Let's climb down and look at the pool."

He led the way down the rocky slope to where the rusted iron pipe jutted from the side of the hill, a thin trickle of water dripping constantly into the pool below. The pool was actually a catch basin in the rock.

Rick examined the pipe. It was ordinary, rusted but still sound. It held no secrets that he could see. He held his mouth under it and tasted the water. It was cold and good, typical spring water, with the taste of minerals in it. He knew from Dr. Miller that it was good to drink. Picnickers used it regularly.

"Expect evidence to float out with the water?" Barby asked.

"Never can tell," Rick said, unperturbed. His sister, even more than Jan Miller, was an incurable romantic. If the ghost turned out to be something other than the pitiful shade of Captain Costin, she would be bitterly disappointed, Rick knew.

He got down on his knees, Scotty beside him, and they probed in the water of the rocky basin with their hands. There was a layer of brown algae in the bottom, which was to be expected. It looked dead, but when Rick scraped it, there was green underneath the brown.

Scotty took out his jackknife and probed with the largest blade. Clearly, there was nothing in the basin but a solid rock bottom.

The boys' eyes met. "The pool bubbled a little last night," Rick recalled.

Scotty nodded. "I saw it, too. But there's nothing there to make it bubble."

Jan Miller shuddered. "I almost died when you two idiots scrambled up here. You went right into that awful mist!"

Rick remembered the icy tendril that had curled around his face and a little chill went through him. "It was cool," he said. "At least the Blue Ghost isn't warm. Maybe he's blue with cold."

Scotty used his jackknife to probe at cracks in the rocky hillside. It was seamed with them, but he found nothing unusual. "I give up," the dark-haired boy said, his face showing his bewilderment. "There's absolutely nothing here. So where did the ghost come from?"

"Where does any ghost come from?" Rick asked. "Same place." Their inspection should have settled it, but he wasn't ready to quit yet. To give up would mean admitting that the Blue Ghost was really a spook. He might have to admit it eventually, but not until all avenues of investigation were closed.

"Now what?" Scotty asked.

"Let's look around some more."

Barby thought this was nonsense and let them know it. "You two can prowl around all you want to," she said. "But I'm not going to get an overdose of sun spook hunting on the rocks. Coming, Jan?"

"Lunch at noon sharp," Jan reminded the boys. "We'll go help Mother. Good luck."

Rick and Scotty watched them go, then sat down next to the pool.

"What's on your mind?" Scotty asked.

Rick shrugged. "Nothing. I haven't the ghost of an idea about this ghost."

"It was pretty real," Scotty remembered.

"Too true." It was so real that Rick almost believed in it. But he was bothered by a vague feeling that something was wrong.

"Look, Scotty. I've read plenty of ghost stories, and I've read the book by Charles Fort that Dad has in the library. Nothing was ever said about this kind of ghost. I mean, a ghost that went in for public appearances promptly at nine whenever he had an audience. Of course, there's no rule that says a ghost has to behave in any definite way, but this is too . . . well, it's too perfect, if you know what I mean."

"I do. It's almost like a show, isn't it?"

"That's it. It's a performance more than an appearance, if there's any distinction. The ghost did exactly what he's been doing. Same act."

Scotty grinned. "Why not? The act is part of the legend, and it's a pretty convincing one."

Rick cocked an eyebrow at him. "Whose side are you on? The ghost's or mine?"

"I have an open mind," Scotty explained.

The phrase rang a bell in Rick's head. Open mind —open *mine*. Could there be some connection between the abandoned mine and the ghost? After all, the shaft was almost under them. He broached the idea to Scotty.

His pal rose. "Nothing like finding out. Are you for it?"

"I'm for it. Can we get in?"

"We'll soon see."

The boys scrambled down the hill and inspected the entrance. Boards had been nailed across the timbered opening, but the nails were rusted and the boards weathered. They could get in simply by pulling the boards loose.

"How about light?" Scotty asked. "We didn't bring a flashlight."

"We can do that later. Right now let's take a look at the entrance. That will tell us if there has been any traffic around."

The boards came off easily with the screech of old nails pulling loose. In a few moments enough boards were pulled away to allow them to enter on hands and knees. A top board was pulled off to admit light, and they went in together, inspecting the ground closely.

"No sign of visitors," Scotty said. "Look at the dust. It hasn't been disturbed for a half century."

Rick thought his pal probably was right about the length of time. The dust was fine, and thick. No human tracks disturbed it, but the boys saw the delicate tracery where a small animal, probably a field mouse or a chipmunk, had left his spoor.

The tunnel was about eight feet high and wide enough for three people to walk abreast. Probably the lead ore had been taken out in carts when the mine was in use.

The shaft went straight in, past the range of light filtering in from the entrance. Nowhere was there a

sign of human occupancy or activity, except for the ancient marks on the tunnel walls made by tools in the hands of miners long dead.

"Nothing here," Rick said, and his voice was lost in the emptiness of the shaft.

Scotty grunted. "Another dead end. Okay, where did the ghost come from?"

Rick didn't know. He couldn't even imagine. He puzzled over it as they walked outside, then suddenly snapped his fingers. "Did you see any sign of water in there? Or a pipe?"

"No. It was dry. No pipes. Why?"

"How was the original artesian well driven? Right into the hillside? If so, why didn't the mine tunnel strike water?"

Scotty scratched his chin. "Now that you mention it, I haven't the faintest idea. Have you?"

"Negative. I can't ever remember having so few ideas. But it's strange. We'll have to ask Dr. Miller about it."

"Maybe the answer is deeper in the mine," Scotty replied. "Let's go back and see."

Rick reminded him that they had no lights. "I suppose we could make torches out of junk from the trash cans."

"Easy, if we can find some newspapers."

There were several trash cans spotted around the picnic area, and it was indicative of the kind of neat people in the vicinity that they were used. There was no litter.

The second can yielded two entire newspapers, one

a bulky edition of a Washington paper, the other a ten-page local sheet. The boys split the papers evenly, then rolled them tightly. They frayed one end with a jackknife to make the torch.

"Got a match?" Rick asked.

Scotty looked at him blankly, then grinned. "No, have you?"

"No match, no flint or steel, no . . . hey, wait! I've got a pocket lens!"

Rick's enthusiasm for microscopy had extended to the purchase of a twelve-power pocket lens to supplement the microscope Barby had given him. The pocket lens was used for examining specimens before taking them home for closer scrutiny under the more powerful instrument. Rick had not yet gotten used to carrying the small lens and had forgotten it until the need for a burning glass arose.

He took the lens from his watch pocket and unfolded it from the protective metal case. It focused the sun's rays to a pinpoint of intense light and heat, and the charred paper then burst into a tiny flame. Rick blew the flame into life, then put his lens back for safekeeping.

"Nothing like the scientific method," he told his pal. "Who needs matches? Come on. Let's burn that ghost out of there."

Scotty grinned. "Nothing like luck," he corrected. "Okay, I'm right behind you."

They retraced their steps into the mine. Rick noted as they went through the entrance that the old mine timbers were pretty well rotted through. He guessed

that the mine had been boarded up because it was unsafe. He and Scotty would have to be careful.

In a few moments they were in deep gloom, only the smoky, fitful flicker of Rick's torch giving them light enough to see by. The newspaper wasn't burning very well, probably because he had rolled it too tightly. They could see only a trace of daylight.

The old shaft turned at nearly right angles where a geological fault had forced the Civil War miners to change directions in order to follow the vein of good ore. The turn cut off most of the light, except for the waning flicker of Rick's torch. Scotty hurriedly held his own torch to the flame to light it.

Rick was never sure what happened at that point, whether Scotty's torch pushed too hard and extinguished his own, or whether a sudden icy wind blew through the mine shaft. He knew only that they were instantly in darkness, while faraway ghostly laughter echoed in their ears!

CHAPTER V

Night Alarm

RICK lathered a hot dog with mustard and took a satisfying bite. It was a down-to-earth hot dog with no mystery, no eerieness about it, for which he was grateful. He hadn't admitted it, but the incident in the mine had shaken him.

Dr. Miller passed the milk pitcher to Rick, then asked, "Are you certain you heard laughter? It wasn't a trick of the wind?"

"I'm sure it was laughter," Barby said solemnly. "Captain Costin was laughing at mortals who dared to enter his tomb."

Rick glanced at his sister, hoping she was joking. She wasn't. "I'm not certain," he admitted. "It all happened at once. I mean, the torch went out, there was a sort of sudden breeze, and we got out of there into the daylight."

He had a mental image of he and Scotty executing that ancient and honorable maneuver known as getting out of there! They had reached the mine entrance in a dead heat, probably breaking several world's records for foot racing.

"We didn't stop to listen," he added with some embarrassment. "We just got."

"Well, I should think so!" Jan Miller said vehemently. "It's a wonder your hair didn't turn white."

Scotty raised a hand and ruffled his dark crewcut. "Didn't it?" he asked ruefully. "I took it for granted that it had."

Dr. Miller chuckled. "Put on a few more hot dogs," he called to his wife. "These boys need nourishment. They've been through an ordeal." To Rick and Scotty he said seriously, "You needn't be embarrassed. The fear of the unknown, combined with the fears we have of closed places, almost complete darkness, and our own physiological reactions to the unexpected make us do our thinking with our legs instead of our heads in some situations."

It was neatly put. Rick acknowledged the scientist's statement. "It isn't as though we had been scared away for good. We're going back, equipped with lights a ghost can't blow out."

"And I'm certain you'll find nothing but an abandoned shaft," Dr. Miller replied. "After all, the dust showed no sign of human occupancy, you said."

"Ghosts don't leave tracks," Barby murmured.

Scotty accepted another hot dog from Mrs. Miller. "Thank you. Look, everyone, we can make two assumptions. Either that the ghost is real, in which case we call in the Society for Psychic Phenomena, or that the ghost is a man-made thing, in which case we search for the man."

"I'm still not buying assumption number one," Rick

stated flatly. "My hair may be white, or close to it, and I'm ready to admit that the apparition is a mighty convincing spook, but I don't really *feel* it's a ghost."

Jan Miller spoke up. "Rick's hunches are pretty good. If he doesn't believe in the ghost, it isn't just because he's a doubting Thomas. I think the boys should go ahead with their investigation on the assumption that the ghost is caused by someone."

Barby shook her head, more in sorrow than in anger. "I thought you had more faith than that, Jan."

"It isn't a question of faith," Jan explained. "It's a question of where you start. If we start by accepting the ghost as real, there's nothing we can do. Anyway, we invited the boys down to try to solve a mystery, didn't we? I guess that proves we didn't truly believe in the ghost."

Rick grinned at the dark-haired girl. "Okay, Jan. Now, to carry on where Scotty left off, if we assume the ghost is man-caused, we have to assume it isn't a practical joke, or that it is. What's the vote?"

"No evidence," Dr. Miller said thoughtfully. "It could be a practical joke, although it's an elaborate sort of thing. More complicated practical jokes than this have been pulled by expert jokesters. On the whole, however, I'm inclined to vote against the joke assumption on the grounds that it has been going on too long. Jokesters are not noted for their staying power. By this time the secret would be out, or we'd be having variations. The apparition wouldn't have fallen into a routine."

Dr. Miller had spotted exactly the thing that was troubling Rick. It was routine, but ghosts are traditionally far from routine. That was actually the biggest argument for assuming that it was man-made, and that it was not a practical joke.

He voiced his thoughts aloud, then asked, "If man-made, and not a practical joke, what's the motive?"

No one replied, because no one had a possible answer.

"Find the motive and you find just about everything else," Scotty commented.

"True enough," Rick agreed. "But if we can't guess a motive, let's try another tack. When did the ghost first appear?"

Barby answered. "Right after the Civil War."

Rick was patient. "I know. I mean, when did the ghost start making his recent appearances?"

"About a month ago," Dr. Miller replied. "We first heard about it from our tenant farmer when we arrived here from Spindrift. He was full of the news, as you can imagine. The ghost first appeared at a Girl Scouts' campfire. An annual event. The girls are supposed to camp overnight. Needless to say, they didn't."

Rick had a quick mental impression of uniformed girls scattering like leaves in a hurricane. "The appearances have been regular since then?"

"Yes. So far as we know, the ghost always appears at nine."

Rick scratched his chin thoughtfully. "I wonder if he appears when there's no audience?"

Scotty chuckled. "That's like the question about does a falling tree make a noise if there's no one to hear it. How can you tell?"

"I just wondered if the ghost would appear for a small audience, like one or two people."

"Meaning us," Scotty said with resignation. "When do we try, tonight?"

"Could be. Are there any picnics or meetings scheduled for tonight, Dr. Miller?"

"Not that I know of. The next big affair is two days from now. The Sons of the Old Dominion have their annual steak and crab feast. This is the Old Dominion State, you know. It's a major event in this area."

"Then we'll try tonight," Rick stated, with a glance at Scotty. His pal nodded.

Over a second hot dog, then a third, Rick continued his line of questioning. Not until he began to ask more about details of mine ownership did one interesting fact come to light. Dr. Miller had received an offer to buy his property at a price considerably above the going market rates just before the ghostly appearances started.

"The offer wasn't for all the property," Dr. Miller added. "Only for the portion along our eastern line. It includes the field where you landed, the picnic ground, and our part of the mine property. The house and orchard were not included."

"How valuable is the part asked for?" Rick queried.

"Not valuable at all, except that the field could be used for hay or alfalfa. That's why I was rather puzzled."

"Who wanted the land?" Scotty asked.

"I don't know. The offer came through Jethro Collins, a local real-estate man. He said he was acting as agent for out-of-town interests that preferred to remain unknown for political reasons. It sounded fishy to me, and I refused."

"Because it might be crooked?" Rick asked quickly.

"No. That didn't occur to me. I thought that industrial interests might want the property, and I'm not anxious to have a glue works or something set up as a neighbor. Besides, I don't care for Collins. I'd rather not do business with him."

"Could the old mine have any value?" Rick persisted.

"No. The lead remaining is of such poor grade that it wouldn't be of any use. I'm sure that the mine would have been abandoned even before the Civil War if the South hadn't needed the lead so badly. Of course we're only part owners, anyway. My grandfather owned it jointly with the Hilleboes, our next-door neighbors. They own the property beyond ours, and uphill from the mine. We've never worried over the ownership of the mine itself, because it's worthless for any purpose."

Rick thought it was curious that an offer should be made for worthless property just as the ghost put in an appearance. It required looking into. He wondered how to go about it, and decided perhaps a chat with the real-estate agent might be useful. Dr. Miller readily gave his permission to try.

To Rick's other question, Dr. Miller had no answer —that was the odd location of the pipe from which the spring water trickled. The scientist could make only one suggestion. "Perhaps the hole was drilled vertically, and a horizontal feed put on for convenience. Then, later, the area was covered over by tailings from the mine, leaving only the horizontal pipe. After all, the pipe is not directly over the mine shaft. It is well to one side, perhaps six or eight feet."

That was a reasonable suggestion, and Rick let it drop for the time being. In fact, the boys let the entire subject drop for the rest of the afternoon, although Rick kept worrying the problem as was his way when confronted with a puzzle.

The Millers had a badminton court in the shade of an enormous old oak, and after a short pause to let the hot dogs digest at least partially, Rick and Scotty let themselves in for a series of trouncings by the girls, who had obviously been playing intensively. It was embarrassing, to say the least, but neither boy begrudged the girls their success.

Not until dinner was ended did the subject of the ghost in Union blue come up again, then Rick started his probing once more.

"The business about an offer for the property may not be connected, but it's a curious coincidence. Now, what else happened about the time the haunting began? Any other facts, even unconnected ones?"

The Millers could think of none, but Mrs. Miller suggested that Belsely, their tenant, would know of

anything new or unusual. Rick agreed to talk with him.

At eight o'clock, armed with flashlights, the boys departed for the old mine. They approached the area with caution, on the alert for any possible visitors. But the picnic ground was completely abandoned.

A quick inspection of the mine showed only their own footprints. The boards had been left off the entrance during their earlier inspection, and apparently no one had been there since. Then, at Scotty's suggestion, they looked for a place of concealment from which to hold vigil.

Rick found it, high in an oak. It was an easy climb, and from the huge limb they could look through a screen of foliage and see without being seen. Both boys were satisfied that they were unobserved. No humans knew they were in the vicinity.

The Virginia mosquitoes were not so easily deceived. Both boys were promptly located by a scouting party, and mosquito communications went into fast operation. Within a few minutes the entire local mosquito air force had invaded the tree. Rick waved his hands futilely at the whining swarm and muttered unhappily, "There are so many they have to line up for a bite."

"I know," Scotty replied in a whisper. "I wonder if they bite ghosts?"

"We'll soon see. It's a few minutes to nine."

In spite of the insects, the boys concentrated on the catch basin, alert for any sign of the ghost. Their

flashlights were ready to probe the apparition if it should appear.

Rick glanced occasionally at the luminous dial of his watch. Then, on the stroke of nine, he whispered, "Now."

Nothing happened. The boys bore the mosquitoes stoically and waited. Not until his watch showed 9:15 did Rick speak aloud. "Let's get out of here. I doubt that the ghost will be any later than this. He's not performing tonight."

They dropped to the ground and scratched luxuriously. Scotty shook his head. "No audience, no ghost. Mighty interesting."

"I'm with you," Rick agreed. "Now, suppose the ghost had known we were going to be there. Would he perform for an audience of two?"

"Good question."

"We'll try for an answer tomorrow night," Rick stated. "Tomorrow we'll spread the word around town that we're going to be watching, and let's see what happens."

Scotty scooped up a pebble and tossed it into the creek as they crossed the bridge. "You're sold on the man-made idea, huh?"

"Aren't you?"

"I would be if I had the slightest clue about how a ghost can be produced. But this one baffles me. No darkened rooms, no ghost trumpets, no knocks on tables, not even a chain clanking. A puff of mist and the ghost appears. How is it done?"

Rick didn't know. He didn't even have an idea.

"The pool bubbled," he remembered. "That's our only clue. Why did the pool bubble?"

"Essence of spook," Scotty replied. "Spook essence does that to water. Seriously, we poked in the bottom of the pool and found nothing."

"That doesn't mean there was nothing while the ghost was performing," Rick pointed out. "Only that no trace was left."

"You thinking about chemicals?" Scotty lengthened his stride toward the inviting lights of the Miller farmhouse. "And speaking of same, I need some for these mosquito bites."

"Chemicals can produce a mist," Rick pointed out, "without leaving a visible trace. We didn't taste the water in the pool. I'm going to take a sample tomorrow and see what I can find out."

The girls and the Millers were on the screened porch, waiting anxiously.

"No show," Rick called, anticipating the questions from the four on the porch. "Not a sign of a spook. Only mosquitoes."

"I have something for those bites," Mrs. Miller replied quickly. "The mosquitoes are fierce this year. Come into the kitchen and we'll treat both of you."

Between applications of the aromatic ointment the boys reported on their experience, or lack of it. Rick concluded, "So the ghost performs only before an audience, and then only when notified in advance."

Dr. Miller smiled. "A pretty sweeping conclusion from a pretty small sample, Rick. One experiment doesn't do more than give a single point on the curve.

You need more evidence than tonight's failure."

"We'll try again," Rick answered. He outlined the plan to let it be known that they would be watching.

"That will be added evidence, but not conclusive," the scientist warned. "But you're on the right track, I'd say. Now, let's leave ghosts and go on to something more tangible. I have an interesting device made up of alternate black and red squares, on which various carved pieces, resembling royalty . . ."

Rick held up a hand. "Say no more. I will be delighted to take you on for a game of chess."

Barby and Jan returned to their own project, creating monograms to be embroidered on their summer clothes, while Scotty and Mrs. Miller settled down with books.

Rick knew from the start that he was no match for Dr. Miller, but he resolved to give him as good a game as possible. An hour passed before it was clear that Rick would be checkmated in two moves. He sighed. "You've got me, sir. I guess . . ."

The sentence was never completed. The quiet was abruptly shattered by the strident blasting of the plane's alarm system!

Rick and Scotty were on their feet and running on the instant. Rick reached the door first and threw it open, almost upsetting Belsely, the tenant farmer.

The man's eyes were wide, and his face was pale under the tan.

"It's the ghost!" he shouted. "It's him! In the field, by the plane!"

CHAPTER VI

The Dark Pit

THE plane's klaxon horn wailed through the night with a noise audible for miles. The boys pushed past the tenant farmer and ran through the screen door on the porch. The plane was not yet in sight and it was very dark out. The moon was hidden by a bank of low-lying clouds, a precursor of rain.

Rick ran as fast as his long legs would carry him, which was fast enough to hold a track record or two at Whiteside High. Scotty, in spite of his greater weight, was not far behind.

At least one question was answered, Rick thought as he sped through the trees, ducking now and then as he caught a glimpse of a low branch. The ghost could set off an alarm system! He fumbled in his pocket to be sure that he had the keys to the plane, and wondered if he would be in time to keep the apparition from causing damage.

In the next instant he burst through the fringe of the orchard and broke stride as he saw a pale-blue light dancing in the air around the dark shadow of the Sky Wagon!

Scotty was right behind him. He, too, paused for an instant as he saw the light, then both boys were moving at their best speed again.

Rick tried to control his breathing. The spurt was taking its toll, but if he kept going he would get his second wind. He had to get to the plane! He wondered briefly if a supernatural being could do physical damage, then discarded the thought. He wasn't ready to accept that anything supernatural could trigger purely physical alarm systems!

The light seemed almost to have features as Rick drew closer, like a pale-blue jack-o'-lantern, but it was soon clear that this was no hollowed pumpkin head. It was like a human head illuminated from within by some ghastly luminescence.

"It's moving," Scotty called, his voice shaky. Rick saw at the same time that the apparition was retreating, slowly, away from the plane.

It kept the distance constant, always retreating as the boys neared. Their own pace had slowed; the initial sprint couldn't be kept up.

Rick ran directly for the plane, jumped the low wire fence, and inserted his key in the door. He turned the key and the deafening blast of the horn cut off, leaving a deep silence. He turned the key back again, resetting the alarm system, then he jumped the fence once more. "Where is it?"

"There." Scotty pointed to the bank of the creek. The ghostly blue light was swaying, as though in invitation, but it was no longer retreating.

"What is it?" Rick asked. "It looks like a human

head lighted from within. But it's too far in the air to be at head level, unless this Union bluecoat was seven feet tall."

Scotty replied with conviction. "It has to be someone carrying a light."

"Can you see anyone under it?"

"No, but that means nothing. The trees make a dark background. I thought I caught a glimpse of a body under it while we were running, but I can't be certain."

"There's one way to find out," Rick said, and was astonished to find that he didn't get cold chills at the thought. "Let's catch him!"

Scotty's reply was to take off in a racing start toward the blue light. Rick had to stretch his legs to catch up, and saw the ghost begin its retreat again, always maintaining the distance between itself and the boys. It danced in the air like a will-o'-the-wisp, as though inviting the boys to hurry.

The pace was slower now, because the relatively smooth surface of the field had been left behind and the course led through bunch grass with an occasional clump of brambles. The ghost danced along the creek bank. Whatever might be under the light was constantly invisible against the fringe of trees. Then it vanished among the trees for a moment, only to reappear.

Rick thought grimly that it was going to be a long chase. Once he stopped in his tracks and whispered to Scotty to do the same. Both listened, but there was no sound other than the normal night noises. Rick

knew their own passage had been noisy, marked by the crunching of dry bunch grass, the crack of an occasional small twig of brush, and other sounds of hurrying feet, but the ghost moved with the silence of a—well, a ghost!

In spite of himself Rick felt a moment's chill, then he pressed his lips tightly together and hurried on. It was no ghost, he told himself. *It was no ghost!* Someone was carrying a light, that was all. Ghosts do not carry lights.

The chase led into the trees, and onto rising ground. There were rocky outcroppings now, and Rick knew they had reached the foothills. The creek cut its way through the foothills for a short distance, then turned to follow an easier path on its way to the sea.

The underbrush was thicker now. This was typical Virginia second-growth forest, full of low brush and creepers. Rick knew it only by feel, however, because it was so dark he could only sense the presence of trees before crashing into them. The blue light vanished periodically behind trees, only to reappear again as though urging them on.

Then, as they broke into a denser thicket, the light vanished completely. Scotty muttered under his breath. Rick peered through the blackness eagerly, taking deep breaths. He had thought they were actually gaining for a moment.

He stood still, his chest heaving. Scotty stopped beside him. There was no sound. Even the night noises of the forest had ceased. There was a weird feeling

of hollowness in the air, as though they stood in some great cavern. Rick whispered, "Where did it go?"

"Don't know," came Scotty's breathless reply. "Keep an eye out while I tie my shoe."

Rick sucked in his breath. The blue light! It was closer, tantalizingly close. He suddenly realized he stood on the edge of a clearing, and the blue light hovered on the opposite edge. It danced mockingly.

"Come on!" Rick bounded away from Scotty, and crashed through a dozen feet of underbrush, intent on the light. It wasn't moving! It hovered, as though waiting. For an instant his determination faltered. One thing to chase an object, another to have it wait for you!

He charged on, and his foot slid on soft dirt. He lost balance and his arms flailed to regain his footing, too late! He slid, his back striking painfully as he flew into blackness!

Rick fell, turning slowly through the air. He had time for one brief yell of fear and warning before the wind was smashed out of him. He plunged deep into icy water and struggled frantically as he plummeted into the depths.

It seemed to Rick as though he plunged downward for an eternity. He had no breath; it had been slammed out of him from impact with the water. But he resisted the terrible temptation to breathe and drove his arms downward to check his plunge. In a few seconds he was shooting to the surface again, his chest an agony from lack of air. His arms and legs worked as he literally clawed his way to the air once

more, and he shot high into the blessed atmosphere as he broke the surface.

Rick floated, lying on his back, breathing deeply and grateful just to be alive. He heard Scotty calling his name, but had to wait for several breaths before he could manage a weak yell.

He didn't know what had happened, except for one clear thing: they had been mousetrapped. The ghost had lured them on, waiting until the pit was reached before pausing in flight to give them a chance to catch up. And the chance had turned out to be the trap.

"Rick! Can you hear me?"

"I hear you." Scotty seemed terribly far away. Then Rick saw his friend's silhouette, as a dark shape against the lesser darkness of the sky. At a guess Scotty was fifty feet up.

"Hang on while I get a light!"

Rick wondered if his pal was going all the way back to get one of the flashlights they had left behind in the precipitous chase. He wasn't worried about his ability to stay afloat.

He had his breath back somewhat now, so he paddled slowly to a point on the wall of the pit under Scotty's position. He bumped gently into rock and felt with his hands while treading water. The rock surface was rough, but the roughness was regular, the wall flat. Then his fingers felt a groove and his mind created the image to match it. A drill hole! He was in a quarry!

It made sense, Rick thought. This was good lime-

stone country. The ghost had simply led them to an abandoned limestone quarry, and he had obligingly fallen in! A miracle he hadn't broken his neck.

Yellow light cut the darkness and he looked up. Scotty apparently didn't intend to be caught without matches again, for in a moment he appeared, a torch of dry twigs in his hand. It blazed brightly. Scotty placed it on the quarry's lip and added more fuel. The flames mounted higher as the wood caught. Only when the flames were high enough to see by did Scotty look down.

"See a way up, Rick?"

Rick was already searching. On the side to the right of where he had fallen in was a shelf about two feet above the water. It led to another shelf. He swam for it and pulled himself out, shaking water from his clothes. The second shelf was easily reached, but then he was stuck. It was easily twenty feet to the rim. The flickering light showed a sheer wall that could not be climbed without a rope.

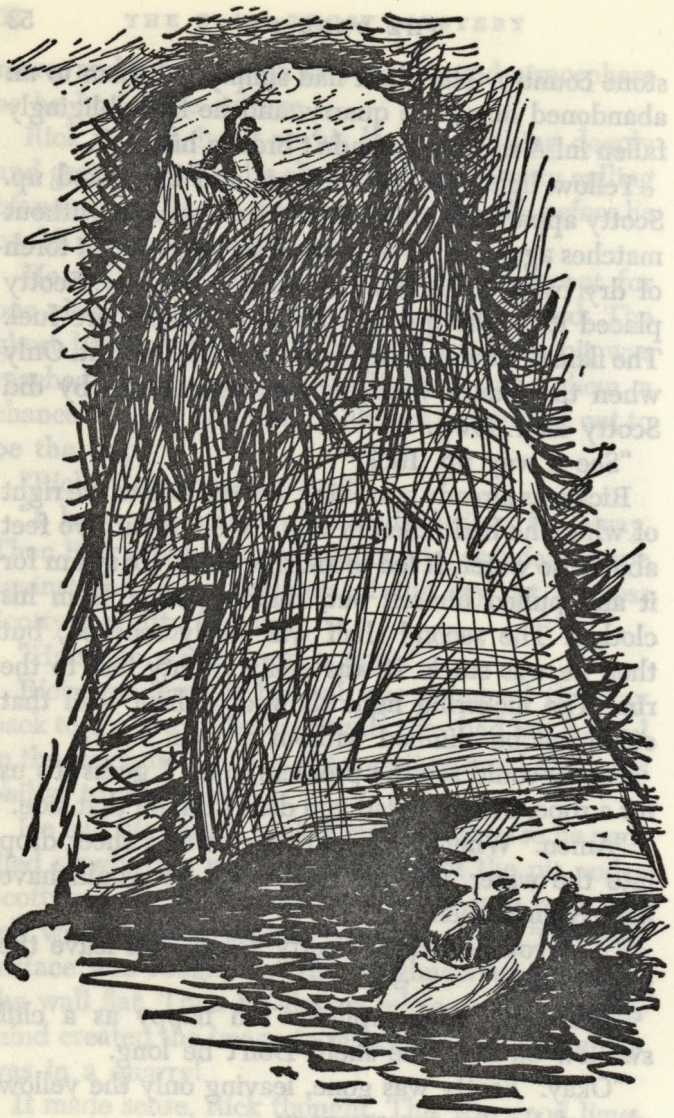
Scotty could see the problem, too. "I guess it's us for a rope. I'm sure glad you didn't fall on that side."

"Amen." Where Rick had fallen was a sheer drop into the water. On any other side he would have landed on a shelf.

"Will you be okay?" Scotty asked. "I'll leave the fire burning."

"Take off," Rick replied. "I'm happy as a cliff swallow on my little shelf. Don't be long."

"Okay." Scotty was gone, leaving only the yellow glow of the fire for company.



"See a way up, Rick?" Scotty called

Unless, Rick thought, the Blue Ghost was hovering nearby, snickering at the success of his efforts.

Thankful that it was a warm night, he removed his garments one at a time and wrung the water from them. The surface of the quarry pool caught the yellow light of the waning fire as he poured water from his shoes. He was very thoughtful. What was the meaning of the night's events?

His wringing out finished and his damp clothes back on, he sat down on the limestone shelf to be as comfortable as possible while waiting.

He had set out at top speed to catch a ghost, but the ghost had caught Richard Brant. He wasn't sure what that meant, but he was sure it meant something. He shivered, as much from reaction as the dampness. Maybe time would tell.

CHAPTER VII

The Frostola Man

RICK BRANT was filled with cold anger. It showed in the determined set of his lips as he swung Dr. Miller's car around the turn leading to the bridge across the creek. He was no longer content to wait for developments. After last night's episode, he and Scotty intended to take the war to the enemy—for war it had become, the moment the Blue Ghost had led them on the wild-goose chase ending with Rick in a deep quarry.

It was pure luck that Rick had not been hurt by the drop into the quarry. True, the ghost had led them to the side that dropped sheer into the water, but impact with the water after a fifty-foot drop was enough to cause damage if one landed in the wrong position. Rick had hit feet first, simply by chance.

Scotty looked at him as the car turned toward the picnic grounds. "Aren't we going to town?"

"Sure. But I want another look at the landscape."

"What do you expect to see?"

"I don't know," Rick admitted. "I'm just hoping for an idea."

He drove through the trees, across the picnic ground, and came to a stop before the mine shaft. There was no one in sight, and the grounds were just as they had left them.

Rick studied the scene, searching for anything off-beat, any anomaly. There was nothing, except for the iron pipe from which spring water flowed. That bothered him. Dr. Miller's explanation might be the right one, but he didn't really think so. If tailings from the mine had been dumped there, the hill would not be so steep or so regular. The years would have weathered the rock debris, but not to such a natural-looking formation.

"If they didn't dump the tailings there," he thought aloud, "where did they dump them?"

"Tailings?" Scotty prompted.

"Rock from the mine. Stuff with no ore in it, or such low-grade stuff that it was worthless."

"I see. Well, they didn't dump it in sight. But they couldn't have dumped it far from here. It wouldn't be sensible to cart worthless rock away any distance."

They hadn't used the tailings for roads around the mine. The roads were natural dirt, with good drainage and no sign of rock ballast. Rick tried to imagine another use, but couldn't, until Scotty spoke.

"Suppose they used up all the rocks throwing them at the Yankee soldiers?" Scotty asked whimsically.

The question started a train of thought that gave Rick the answer in a few seconds. "You've hit it. They didn't throw the rocks, but they used them against the Yankees. I'll bet on it. Come on."

He got out of the car and led the way through the trees to where the creek flowed on its quiet way. There were low embankments a few yards back from the water's edge. "There are the rocks."

"Where?" Scotty couldn't see them. "I don't see nary a rock."

"In the embankments, covered with dirt. See? There's a place where the dirt cover has been washed away by the rain. I've seen defenses like this before. They used rocks as a base, filled in the cracks with clay, then put dirt on top and planted grass to hold it. That gave them a permanent earthwork."

"Why plant grass?" Scotty wanted to know.

"To fool enemy reconnaissance, I guess. I can't think of any other reason, except to prevent erosion. In those days scouting was done by cavalry, and from the other side of the river these look like natural grassy banks."

Inspection of the embankment disclosed that Rick had guessed right. Scotty inspected the place where the rain had washed the topsoil away, probably because some careless picnicker had ruined the grass in that spot. The rocks were clearly of the kind in the mine.

Suddenly Scotty bent lower and began to pry at something. "Rick, there's something buried here."

Rick hurried to help out, and in a moment they had lifted away enough rocks to disclose a considerable amount of moldy cloth.

Scotty took a piece and shook it, then chuckled. "The answer is in the writing on the bag. Wilbur's

Premium Portland Cement." He grew serious. "Only where was it used? I've seen no construction around here."

"Maybe someone brought picnic supplies in the bags and buried them with the garbage," Rick said.

"I doubt it. You can't get all the cement out of a bag, because the powder sticks in the fabric. If you try to wash it out, it only sets the cement."

Rick thought his pal probably was right. No one would use a cement bag for supplies, now that he thought about it. He looked up suddenly as a sound came through the trees. It was a motor, but a small two-cycle kind, like a scooter or a small motorcycle.

"Someone coming," he said. "Let's go see who it is."

Scotty held onto the bag. They walked back through the trees and into the camping ground in time to see a lanky, white-clad individual on a three-wheeled motor scooter—the kind where the driver sits on a cargo box—come to a stop. On the box were blue letters, dripping with white frost, that spelled FROSTOLA. Underneath the letters was a list of products: cream pies, frozen cones, cream sandwiches, icicles, and quarts and pints.

Although Rick had never heard of Frostola, it was immediately clear that this was an ice-cream vendor, of the kind that appears in swarms in warm weather with ringing bells and tooting horns, in trucks, on scooters, and even on bicycles.

The Frostola man gave them a cheery wave and tilted his white cap to the back of his head. "Hi! Where's the crowd?"

"We're it," Scotty answered. "Were you expecting more?"

"Wasn't expecting anything," the man retorted. "It's a nice day for a swim, so I thought I'd come sell refreshments to the swimmers."

"They're afraid of ghost fish," Rick said. "The place is haunted."

The man grinned. "I heard about the ghost. If he shows up I'll sell him a cream pie."

"Sell me one," Rick invited, and Scotty echoed the thought.

"Pleasure." The man got off the seat and Rick saw that he was over six feet tall, and built like a sapling. The boy also saw that he wasn't as young as he at first appeared. That was odd, because the peddlers on scooters were usually either very young or old.

The Frostola man opened the seat box and the boys looked in, at neat stacks of ice cream packaged in various ways. The stuff was kept frozen by slabs of dry ice wrapped in brown paper.

The cream pies were on a stick, and coated with chocolate, butterscotch, and vanilla with coconut. Rick paid for his selection and Scotty's, then commented, "It's a long way out here from town."

"Sure. But I enjoy the ride. It's a chance to get away from howling mobs of kids."

A strange comment from one who made most of his sales to kids, Rick thought. He noticed that the peddler was eying the bag Scotty had picked up, and was trying to be surreptitious about it. Anyone would be curious about someone carrying a moldy

bag, but why try to conceal that curiosity? On impulse, Rick said, "There's a trash can, Scotty. Throw the bag away and let's go." To the peddler, he added, "We're doing our bit to keep the place clean."

"Good thing to do," the man admitted.

The boys got in the car. Rick turned it around and headed for town. The rear-view mirror told him that the Frostola man watched them until the trees hid them from view.

Rick said thoughtfully, "If you were anxious to make your fortune selling Frostola, where would you go to do it?"

Scotty grinned. "My thought exactly. I'd go where there are people. I'd either go up streets ringing my bell, or I'd park at an intersection where cars could stop. I wouldn't go to a deserted picnic ground—if I knew it was deserted."

"If he didn't know, he's a stranger here. Could he be a new man?"

Scotty shook his head. "A new man wouldn't know the way out here, and if he asked, he'd be told that people are staying away because of the ghost."

"True. Your thoughts are as lucid as Costin's Creek, ol' buddy. Also, he is not the typical ice-cream salesman, and he's not from around here. He's a little old for riding a scooter cart, and the look on his face and the way he carries himself are wrong. He doesn't fit the part. Besides, his speech isn't local. He's no more a Virginian than you are."

"He sounds more like a Yankee," Scotty agreed.

Rick sighed. "Well, we've got something, although

I don't know what. Cement bags where there is no construction and an ice-cream man who doesn't fit the part. What do you make out of that?"

Scotty chuckled. "Simple. The Frostola man is building a secret ice-cream stand. A modern one, out of poured concrete walls. He's not building it where anyone can see it, because he doesn't want to be bothered by customers."

Rick grinned. "Okay, Hawkshaw. That's enough deduction for one morning. Take a look at that sky. Have you heard a weather report lately?"

Scotty glanced upward to where mare's-tails were making streaks across the sky. "Looks like a storm brewing. Why not turn on the radio?"

Rick did so, but there was only music from a nearby station, interspersed with local commercials. Before there was a chance to get a weather report they were rolling into town.

Lansdale was too small even to be called a "whistle stop," because no trains came near it. An interstate bus route passed through on the main highway, and that was the sole link with the towns to north and south, except for private cars.

Rick drove right up the main street. He saw a drugstore, an independent food market, a hardware-and-farm-supply store, a variety store, and two gas stations. On the outskirts of town was a huge farmers' market open only on Fridays and Saturdays.

The market was obviously the main center of trade for the farm people of the area. Lansdale would be very busy on Fridays and Saturdays, and just about

abandoned, except for the few hundred people who lived in town, for most of the week.

He turned the car at the edge of town and drove back down the main street. Opposite the drugstore he found the sign he wanted. Jethro Collins, Real Estate and Notary Public. He parked in front of the house.

Collins had his office in what had once been the parlor of his own home. Rick could see him through the window, an enormously fat man in a white shirt and red suspenders. As Rick rang the bell, he yelled, "Well, come on in!"

Once inside, the bull voice was reduced in volume to fit the room, a small one, cluttered with photographs of houses.

"What can I do for you, kids?"

The question was not courteous. The tone said Collins was impatient at the interruption, that he was sure these kids would only waste his time, and that he hated kids and everyone else.

Rick thought he looked like a Chester White hog, only meaner, but he answered politely. "We've come from Dr. Miller's place, sir."

"So? Does he want to sell?"

"No, sir. Not without more information. If you could tell us the name of the purchaser . . ."

"I can. I won't. None of your business. If Miller wants to talk business he can come see me. Now get out."

The boys lingered. "You must admit that it was an unusual offer, sir. The price was rather high for worthless land."

Piggish eyes surveyed them. The bull voice grated, "Get out!"

They went. There was nothing else to do.

Scotty started to get into the car, but Rick stopped him. "Let's go to the drugstore. I want to get a spray can of insect repellent."

"Okay." Scotty chuckled. "You can see why Dr. Miller is not fond of Mr. Collins."

"I'm going to join the anti-Collins club as soon as we get back. Look, druggists know everything about their town. Let's see if we can find out if the Frostola man is new."

Rick opened the screen door and they went into a drugstore that had not changed substantially for half a century, except for the addition of modern sales items. The druggist, a wisp of a man, was friendly. They sat down at the marble-topped soda fountain and Rick asked, "Got any Frostola cream pies?"

"Don't carry them," the druggist replied. "They're sold only by the route man."

"I see you have a new man in this territory," Rick said casually.

Bright eyes inspected him through rimless glasses. "Fairly new. Seems all right."

"He's pleasant enough," Rick assented. "Has he been on the job long?"

"Six weeks, more or less."

The boys settled for cokes, then drove back to the Millers. Rick was pleased. They hadn't made much progress, but at least they had uncovered an interesting character in the new Frostola man. His arrival,

according to the druggist, coincided with the appearances of the Blue Ghost. He traveled to the mine area when no customers could be found there. He was curious about a cement bag. He didn't fit the character of an ice-cream route man.

Rick headed straight for the picnic ground. There was no sign of the Frostola scooter, which meant the man had left right behind them, otherwise they would have met him on the road on the return trip.

On a hunch, Rick got out of the car and walked to the trash can where Scotty had put the cement bag. The bag was gone.

CHAPTER VIII

Plan of Attack

RICK awoke to the sound of wind, a sign that the storm traveling northward from the middle south was approaching. He groaned. If the storm arrived before nightfall, the annual Sons of the Dominion affair would be postponed.

After yesterday's events he had decided to drop the idea of spreading the word that he and Scotty were ghost watching, in the hope the ghost would appear for just the two of them. His new plan wasn't completely worked out, but it would be before long.

Scotty grinned at him from the other bed. "No night alarms last night. Guess the ghost couldn't find anyone to play with."

"Maybe tonight," Rick replied. "Come on, sack hound. Rise and shine. We have things to do."

Scotty glanced through the window at the sky. "We'd better do 'em quick, then. Barring a shift in the weather system, we're due for some fine squalls."

After an excellent breakfast of pancakes and genuine pepper-cured Virginia ham, Rick borrowed an empty jar from Mrs. Miller, checked all the flashlights

available, and explained to the Millers the purpose of the trip.

"I'm going to get a sample of the water from the pool and try to see if there's anything strange about it, then I thought we'd take a closer look at the mine to see if we can trace that water pipe. It still worries me."

To his surprise, Barby and Jan hurriedly finished their breakfasts and announced they were going, too.

"You're going into that mine," Barby explained. "We're going to be waiting outside, and if you're not out within ten minutes, we're going to come home for help."

Rick was touched. Both girls believed in the ghost, Barby more than Jan, while he and Scotty were convinced that it was man-made in some way they didn't yet understand. It took courage for the girls to accompany them, even if they only planned to wait at the mine entrance.

"Okay," he agreed. "Let's go."

Dr. Miller offered, "Take the car. I don't like the looks of the weather and there's no point in your getting caught in the rain."

Rick accepted and in a moment the four young people were on their way. He saw that the sky was filled with haze, with only a glimpse now and then through the haze of flying scud. Something was on the way, all right.

"It's a tropical storm," Jan explained. "The morning weather report from Washington said it would strike northern Virginia this morning."

"And not long from now," Scotty commented.

By the time Rick had collected his first sample, a jarful of water from the pool mixed with a scraping of algae from the bottom, there was an ominous line of black clouds on the horizon.

He hurried to the embankment where Scotty had found the cement bags, his pal close behind him. The girls had waited in the car.

To his surprise there were no bags. Raw earth showed where they had been dug up.

"What do you make of that?" he asked.

Scotty shook his head. "I don't know. The Frostola man must have taken them, but I can't imagine why. Come on. Let's get out of here. This is no time to stand around wondering. That storm is close!"

"No mine for us this morning," Rick said. "Wonder if the rain will last long enough to cancel out the Sons of the Old Dominion, or whether we'll just have some thundershowers?"

"Time will tell. Let's go."

They beat the storm to the house by minutes. It arrived with a rattle of windows and the flash of lightning, followed by thunder that reverberated among the mountains endlessly. The rain came in blinding sheets, covering the windows with a steady flow of water that blocked all vision.

Rick set up his microscope on the kitchen table and plugged in the substage illumination. Then, while the others watched, he selected a well slide, took his pipette, and captured a drop from the jar of pool water. The drop went into the well slide. He put

on a cover glass, then applied his eye to the ocular.

After a moment of focusing and shifting the well slide, the drop of water suddenly turned to a strange aquarium populated by fantastic animals. He watched, counting the species aloud. "Lots of paramecia. A Volvox. Two Stephanoceros. One hydra. Not bad for a single drop. Want to look, anyone?"

Everyone did. Rick waited while the girls exclaimed over the microscopic creatures, and Mrs. Miller remarked to her scientist husband, "And we drink that water?"

Dr. Miller smiled. "No, dear. We drink the water from the pipe. This sample came from the pool."

"But if the animals are in the pool, they must have come from the spring!"

The scientist shook his head. "The spring water is pure. It probably has a lower bacteria count than our well. But the pool water is exposed to the air, and provides an excellent breeding place. Most of these animals propagate from spores, which are in the air."

Rick added, "That's right, Mrs. Miller. When I want a culture I just put some water with a little broth in it out in the open for a day or so, then put it out of direct sunlight. Within seventy-two hours I have a bigger mob of animals than this in every drop."

"Then the Blue Ghost didn't hurt the water of the pool?" Scotty asked.

"Can't tell," Rick explained. "There was no permanent harm done by any chemicals. We can say that much. But you can get a collection like this in

three days, and it's been that long since the ghost appeared. So these animals would be in the pool by now, even if the Blue Ghost had done something to adulterate the pool temporarily."

The storm punctuated his remarks with a gust of wind that rattled the windows.

"It's getting worse," Mrs. Miller exclaimed. "I do hope that it doesn't damage the little apples on the trees. They're so good. We're planning to have bushels shipped to Spindrift when they ripen."

Jan Miller brought them back to the subject. "How could chemicals be harmless to the little animals, Rick?"

"Chemicals might kill off those in the pool, but the constant dropping of spring water would soon dilute the solution. Or, some chemicals would combine with the oxygen in the water to form harmless salts. I can't be sure, of course. I'm just trying to think of ways the ghost might be produced."

Barby sniffed. "You're a long way from an answer, I'd say. Even if your old chemicals could make the white mist, they couldn't make the Blue Ghost appear and go through the business of getting shot!"

"Too true, Sis. I'm not claiming a thing. So far we have only some pretty wild speculation, plus an interesting ice-cream man, an offer to buy part of this property, and some missing cement bags. Old ones, too."

Barby had to smile. "If you can tie all those things together into a ghost, I'll type up your science project for free, and as many copies as you need!"

Rick grinned. "And if I don't?"

"I won't be surprised, but you can get me a new record album."

"Done. You've got a bargain." Rick turned to Dr. Miller. "There's one bit of information your tenant farmer, Mr. Belsely, can get for us that none of the rest of us can get. That is, do the real-estate agent and the ice-cream man know each other, and in particular, are they friendly? He could ask around town without causing suspicion."

"I'll ask him right now," Dr. Miller replied. He went to the telephone in the big farm kitchen and dialed. After a moment he said, "Clara? . . . Is Tim there?" He waited, then said, "Tim, I have a little job for you. . . . No, not that. Just asking a casual question around town. . . . Tim. . . . Hello . . ." He hung up and turned to the others. "The phone went dead."

Rick saw that his substage illumination was out, too. "So did the electricity."

Dr. Miller frowned. "It's unusual for both the phone and current to go out at once. That must mean a tree is down across the lines. Both lines cross the creek within a few feet about half a mile upstream."

There was nothing for it but to wait the storm out.

Rick and Dr. Miller resumed their chess tournament. Scotty spent the time making an improvised game of Yoot, an ancient Korean game that can be played almost anywhere, under nearly any circumstances. At its simplest, the Yoot board can be scratched in the dirt with a stick, and the Yoot throw-

ing sticks that take the place of dice—or a spinning arrow—in similar Western games can be cut from a twig. Scotty sketched the board on a piece of cardboard from a box in which groceries had been carried and made the throwing sticks by splitting a piece of cane from an ancient cane chair in the woodshed. Checkers were used as counters, where in the outdoors pebbles would have served.

"It's like parcheesi," Scotty explained to the girls. "You try to beat your opponent around the spaces on the board. The four sticks get thrown into the air, and you can move one space for every stick that lands flat side up. If all four land flat side up, that's a 'yoot' and you get another throw on top of the four moves. You start, Barby, and I'll show you the other rules as we go along."

At lunchtime Mrs. Miller broiled hamburgers on the charcoal grill out in the woodshed, which connected to the kitchen. Then she used the glowing coals to make coffee in the old-fashioned way, putting the grounds directly into the pan of boiling water. Since the family coffeepot was an electric percolator, this was the only means she had.

Rick would have enjoyed it thoroughly were it not for his impatience to put his plan for catching the ghost into operation. It was certain by now that the affair at the picnic grounds was called off, but with radio and TV silent, there was no way of checking.

The storm continued through the afternoon and into the evening. Dinner was broiled steak, with a tossed salad. If the storm continued for a week, Rick

told the group, they'd all get as fat as Collins from Mrs. Miller's charcoal cooking.

Over coffee he outlined the plan that had been stirring in his mind.

"We don't know the motive for the ghost's appearance yet. We don't know how he appears, either. But unless I'm way off, the Frostola man has something to do with it."

"I don't see how you can say that," Barby objected.

"It's an assumption," Rick admitted. "But what else have we but assumptions? We assume the ghost is man-made. All right. Who's the man? I give you Frostola, the product that produces ghosts.

"Seriously, we have to make some assumptions about our chase of the ghost. If it was a man, it was a tall one with some kind of lighted thing on his head. That wouldn't be hard to rig. Plastic comes in all shapes and sizes and colors, these days, including human heads that are used in store windows. It would be a cinch to rig up a flashlight bulb and battery inside one. Wouldn't take me five minutes if I had a little wire and a soldering iron."

"That's true," Dr. Miller agreed. "Making the Blue Ghost the boys chased would be absurdly easy."

"But leading us on took someone who was a good runner," Rick continued. "He also had to know his way around."

Jan Miller pointed out, "But he floated right over the quarry and you fell in."

"It wasn't like that," Scotty corrected. "We stopped because the ghost had vanished. It's not hard to see

why. He switched off the light, walked around the edge of the quarry, then switched on again."

"That has to be it," Rick agreed. "Now, why try to lead us on like that? It was only an accident that Scotty and I didn't go in together, because his shoe needed tying. Otherwise, we'd both have been at the bottom of the quarry."

Dr. Miller shook his head, in bewilderment, not in negation. "You might very well have been hurt seriously or even killed. In which case people would have blamed the ghost. But why did the ghost do such a thing?"

Rick had wondered about this, too. "I can think of only one reason. The ghost can't stand investigation. He knew we were a menace because Scotty and I ran right up and tried to catch him that first night."

"But why did he tamper with your plane, or try to?" the scientist asked. "He couldn't have known about the alarm. You checked the plane, didn't you?"

"Yes. It wasn't touched, so far as we could see. Anyway, no harm was done. I can't imagine why he went for the plane, though, unless he figured on sabotaging us that way."

"You still haven't told us why you suspect the Frostola man," Barby pointed out.

Rick ticked off the points on his fingers. "He's new. He arrived just as the ghost started making appearances. But he's not so new that he hasn't had time to study the area or to make plans to lead nosy people to the quarry. He was at the picnic ground when there was no chance of selling much ice cream. He

took the cement bags; we don't know why. He's tall and lean, so he could run fast enough to keep ahead of Scotty and me. He's also tall enough to qualify for the ghost we chased."

He stopped and took a deep breath. "And one more thing. He carries something that would make a marvelous mist for a ghost to appear in. Something that might harm the microscopic animals in the pool temporarily—although I'm not sure of this—but would be gone with the mist."

The others stared at him with complete interest.

Dr. Miller said softly, "Of course! Rick, that's brilliant. It fits perfectly!"

Jan Miller wailed, "What does?"

"Dry ice," Rick said.

CHAPTER IX

The Splitting Atoms

THE storm had given way to a fine drizzle of rain by morning. Rick stared out the window at the drenched land and considered the angles he had been turning over in his mind.

The dry-ice theory wasn't conclusive, he knew, but it was a strong indication. It didn't explain the Blue Ghost himself, but it could explain the mist.

Dry ice is simply solid carbon dioxide, which is a gas at normal temperatures. It becomes a solid at low temperatures, and because it is harmless, inexpensive, and clean, it is widely used to keep things cold, as in the case of ice-cream route men who have no means of refrigeration.

When the temperature is raised, dry ice passes directly from the solid to the gaseous state. When dropped into water it seems to boil, as the comparative warmth of the water turns it to gas, and it creates a fine white mist.

Rick was reasonably sure the Blue Ghost appeared in a carbon-dioxide cloud, and he was beginning to

have an inkling of how this was accomplished—in principle, if not in specific terms. There were, after all, he reasoned, only a few ways of creating a visible image. He was going through the list of possibilities, eliminating them one by one.

If the Frostola man was connected with the ghostly appearances, it was only necessary to keep track of that tall individual. This was Rick's plan, necessarily postponed because of the storm.

"Wish we had a radio," he said. "I'd like to get a weather report."

Scotty grinned sympathetically. He knew that Rick was impatient when there was detecting to be done.

"We really should have a battery radio," Dr. Miller said. "Power here is not very dependable in stormy weather. I think I'll get one, although that won't help now."

"What we need is a radio that doesn't depend on power," Jan Miller said. "Then it would always be ready."

Rick stared at the girl, not really seeing her. A radio without power. He remembered a long talk with Dr. John Gordon of the Spindrift staff about the principles of radio. Dr. Gordon had sketched a circuit that needed no power, and then had told Rick of how American ingenuity had produced what soldiers called a "foxhole radio."

"I saw an old transformer in the woodshed," he said suddenly. "May I have it, Dr. Miller?" At the scientist's nod, he addressed Jan. "I'll bet you can find me a cardboard tube. Then, if I can have an old

razor blade and permission to take the receiver off the telephone for a while, I can make a radio!"

The scientist, the girls, and Scotty looked at him with disbelief. "He's gone off his rocker at last," Scotty muttered. "How can anyone make a radio out of junk?"

"I'll need a pencil stub, a few screws, and a piece of board," Rick added. "A safety pin would help, too."

"Rick Brant, you're being silly," Barby said firmly. "This is no time for practical jokes!"

Dr. Miller held up his hand. "Peace, Barbara. Rick isn't joking. I believe I see what he has in mind. Rick, I've never heard of this, but I assume the oxide on the razor blade is to act as a rectifier?"

"That's right, sir. John Gordon told me about it."

The scientist rose. "Then it will work. Come on, gang. Let's build a radio out of junk."

With many hands to help, the work went quickly. Under Dr. Miller's direction, Scotty took the transformer out of its case and the girls went to work unwinding the quantities of wire from its coils.

Rick found a razor blade and anchored it to a rectangular piece of plywood he found in the woodshed. It was a double-edged blade, and one small screw from Dr. Miller's junk box served to hold it. He wrapped a short piece of insulated wire, one of the transformer's connecting leads, under the screw before he tightened it. He sharpened the lead pencil with his jackknife, uncoiled the safety pin, and pushed the sharp end into the exposed lead at the

upper end of the pencil, which was a stub only two inches long.

The safety pin also was screwed to the board, the screw going through the space in the pin's head. It was placed in such a position that the sharp end of the lead pencil rested on the razor blade. Another short piece of insulated wire was wrapped around the screw before it was tightened. Rick bared the copper end of the wire in order to make a good contact.

Jan found a cardboard roll that had once held paper towels. Rick cut off about six inches of it and proceeded to wind it with wire from the transformer. He wound evenly and tightly, until the roll was full of wire. Then he stabbed a small hole in each end of the roll and pulled the wires through to hold the coil in position. The roll—now a coil—was tacked to the board with thumbtacks.

Dr. Miller, meanwhile, had taken the receiver from the telephone. Scotty strung yards of wire around the room and handed the loose end to Rick. That was the antenna. Then Scotty scraped a bright place on a water pipe with his knife and twisted a length of wire tightly around it. That was the ground.

Rick and Dr. Miller made connections. Rick gestured to the haywire apparatus with some pride. "Behold. Where there was junk is now a radio."

Jan Miller said, "I don't believe it!"

Rick had to laugh. "I'm not sure I do, either. But let's try." He sat down at the table and held the receiver to his ear. With the other hand he began the

laborious job of locating a sensitive spot on the razor blade.

Dr. Gordon had told him that only an occasional spot on a blade will work. Some blades have no such spots. Others have many.

Rick was beginning to think that he had one of the no-spot kind, or that the whole idea was wrong, when he heard what he thought was a voice. He hastily concentrated on the spot, and in a few seconds music flooded into the earphone. He had caught a disk jockey in the process of introducing a record. For a long moment he listened, then held out the earphone with a broad grin. "Anyone care to listen?"

Everyone did. They took turns, with each application of the phone to an ear accompanied by expressions of astonishment.

Barby looked at her brother with new respect. "It's just fantastic! How on earth does it work?"

Dr. Miller chuckled. "I'm sure you don't want a full course in electronics, Barby. Actually, it's simple enough. The signal from the radio station is an alternating current that sets up a corresponding current in the antenna wire. This current goes through the coil and is rectified—that is, it's turned into pulsating direct current—by the razor blade. The receiver then converts it into audible sound."

Barby sighed. "I'll just have to take your word for it. But it's a miracle!"

"It may seem like one, but it's really the same kind of circuit you find in a crystal set," Rick explained.

"The razor blade acts like the crystal. That's all."

The young people took turns listening to the station, located in a town nearby. Within the hour there was a weather report promising clearing skies before the end of the day. Later, in a roundup of local announcements, they heard that the annual Sons of the Old Dominion feast, postponed because of the storm, would be held the next night.

"That means we start keeping an eye on the ice-cream man tomorrow afternoon," Rick said.

Scotty nodded. "First, we'd better make a survey of the terrain. He has to approach by the road, but there are a million places he could go once he got into the mine area."

Rick looked out the window. "The rain has stopped. Maybe we can reconnoiter this afternoon."

Fortunately, the Miller farm was well equipped with boots and overshoes. The boys borrowed footgear suitable for any mud left by the rain and started out after lunch.

The picnic area was washed clean of footprints and it was clear no one had visited the area since the rain. They made their way to the top of the hill above the mine and surveyed the cornfield that had been planted on the hilltop field. The corn was not high. The plants came only to their knees. Either it was a second planting or a poor crop. Rick guessed that the second reason was probably the correct one, because the field hadn't been cultivated recently.

"This isn't Miller land," he mused. "Wonder who is farming it?"

"It must be Hilleboe's property," Scotty returned. "Maybe he rents it to some local farmer."

They walked to the downstream edge of the cornfield to where the woods resumed. Rick had a feeling that they were wasting time. The ghost couldn't be produced from such a distance by any means he had ever heard of. The apparition had to be created right in the vicinity of the mine.

He spoke his thoughts aloud, and added, "Let's go back."

"Just a minute." Scotty pointed to a pile of brush. "Aren't those more bags?"

They were, and of the same brand as those the boys had located on the stream bank. Scotty picked one up and tested it between his fingers. "Mighty curious. Water cures Portland cement. Turns it hard. These bags aren't hard, even though some powder is still in them."

Rick examined the bags, his brows creased with bewilderment. "They must have held something besides cement. But what? Fertilizer for the cornfield, maybe? And why two caches?"

"If it were fertilizer, the bags near the mine could have been for the field across the creek where the plane is," Scotty suggested. "These could have been for this field. But I don't think it was fertilizer. Isn't fertilizer soluble in water?"

Rick wasn't sure. "We can take the bag along," he said. "Maybe the microscope will tell us something, or maybe Dr. Miller will know."

He had a feeling that the bags meant something.

They had been hidden, and only the erosion of rain had uncovered them, first at the creek embankment and now here. The Frostola man had almost certainly taken the others. Why? Unless they had something to do with the mystery? The bags were worthless, of themselves.

They finished the survey of the area. It was clear that whoever produced the ghost would have to enter by the road from town, because there was no other road on the side of the hill in which the mine was located. To be sure, the area could be reached by walking a considerable distance, but Rick couldn't see a man with equipment doing much walking through cornfields or woods filled with underbrush. He was certain the ghost had to be produced by equipment of some kind, probably electric powered —which meant batteries.

The problem was, where did the ghost producer operate? If dry ice was used to produce the mist, how did it get into the pool? He had no answers to these vital questions, nor did Scotty.

The dark-haired boy looked at him quizzically as they trudged back to the farmhouse. "Did it ever occur to you that it's impossible for anyone to produce the ghost? There is no place within sight of the pool where anyone could hide, except in a tree, and a man with equipment wouldn't go undetected by a gang at the picnic grounds."

"It did occur to me," Rick admitted. "But doesn't that put us back where we started? Either the ghost is a genuine spook, or it's man-made. We're not mak-

ing many miles an hour in proving it's man-made, I admit. But if it isn't, where does that leave us?"

Rick remembered the chase through the woods, ending with a bath in the quarry. If they had been chasing a real ghost, and the ghost had led them into danger deliberately, that meant . . . He wasn't sure what it meant except that it gave him goose pimples to think about it.

The electricity and telephone service had been restored by the time the boys got back. Dr. Miller told them that he had phoned the tenant farmer and arranged for the man to do a little inquiring in the town.

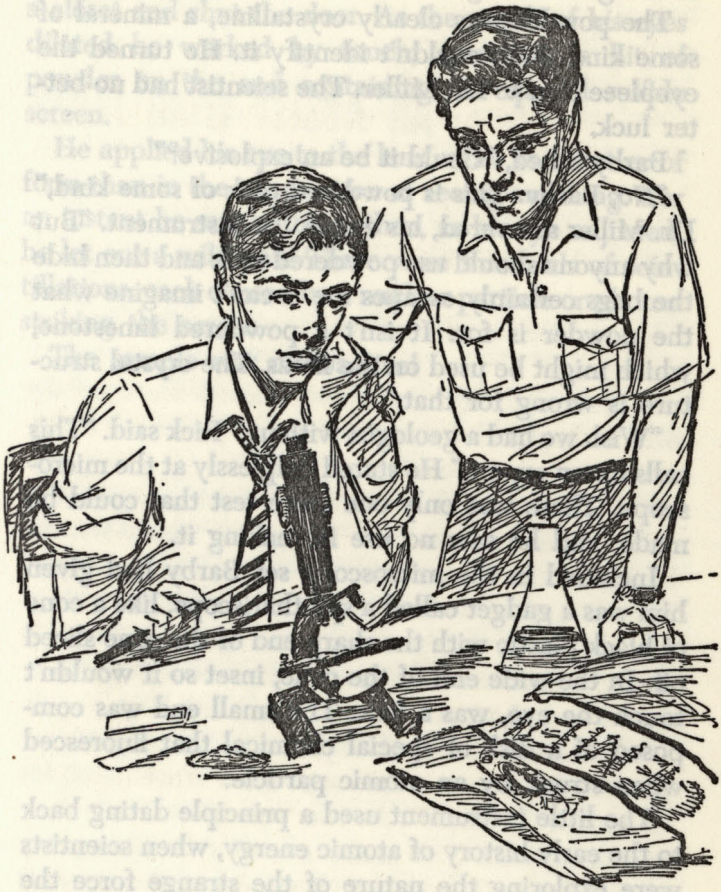
Rick displayed the bag. "Got a specimen," he told the group. He explained their interest in the bag and asked Dr. Miller if he could identify the contents.

The scientist examined the grayish powder from the bag. "It could be any one of a hundred things," he said. "Let's see what we can find out about it."

The farmhouse wasn't equipped for any kind of chemical analysis, but the scientist did what was possible. He tried to dissolve the powder in water, and failed. He tried vinegar, as the only acid available, and failed. He tried ammonia, and failed.

Finally he said, "Well, it isn't cement, and it isn't fertilizer. It's an inorganic substance. I suggest the microscope, Rick. It will at least give us a clue to its structure, if not its identity."

Rick spread a small amount on a slide, switched on the substage light, and put the slide on the stage. He focused, using his highest-power lens combination



"This calls for an expert," Rick said discouragingly

which gave a magnification of three hundred times.

The powder was clearly crystalline, a mineral of some kind. Rick couldn't identify it. He turned the eyepiece over to Dr. Miller. The scientist had no better luck.

Barby asked, "Could it be an explosive?"

"No, Barby. This is powdered rock of some kind," Dr. Miller answered, his eye at the instrument. "But why anyone should use powdered rock and then hide the bags certainly escapes me. I can't imagine what the powder is for. It isn't a powdered limestone, which might be used on the fields. The crystal structure is wrong for that."

"Wish we had a geologist with us," Rick said. "This calls for an expert." He stared helplessly at the microscope. There was only one more test that could be made, and he saw no use in making it.

Included in the microscopy set Barby had given him was a gadget called a spinthariscope, like a cone of black plastic with the sharp end of the cone sliced off. In the wide end of the cone, inset so it wouldn't touch the eye, was a lens. The small end was composed of a disk of special chemical that fluoresced when struck by an atomic particle.

The little instrument used a principle dating back to the early history of atomic energy, when scientists were exploring the nature of the strange force the Curies had discovered in radium and polonium.

It was only his training in thoroughness of investigation that led Rick to use the instrument. Since it was necessary for the eye to become adapted to the

darkness before using the instrument, he took it into a closet and shut the door. As the pupils of his eyes dilated he worked by touch, spreading a bit of powder on the end containing the special sulfide screen.

He applied his eye to the lens, more as a matter of form than in the expectation of seeing anything. For an instant he saw nothing, then, as his eye adjusted, he let out a wild yell. There were hundreds of scintillations, each caused by a nuclear particle or photon striking the screen.

The sample was radioactive!

CHAPTER X

An Assist from JANIG

"We're onto something," Rick said grimly, "and we need help."

"I should say so," Barby commented. She eyed the cement bag a little apprehensively. "After all, radioactivity is dangerous!"

Dr. Miller smiled. "It is, in sufficient quantity. But the sample we have here is scarcely above normal background, so I don't think we need be concerned." The scientist turned to Rick. "I wish your instrument could give us further data, but unfortunately it's pretty primitive. It tells us the sample is slightly radioactive and that's all. I agree we need help."

The nearest source of help Rick could think of was JANIG, the secret security agency in Washington for which the Spindrift scientists had often worked on special projects. This wasn't a matter for the agency officially, but Rick was sure Steve Ames, their contact in JANIG, would help if he could. Since Spindrift had first worked with the agency on *The Whispering Box Mystery,* Steve and the boys had become good friends.

Rick suggested to the others that Steve should be called. All of them knew the young agent. He had been responsible to a large extent for the Millers joining the Spindrift staff, since he had smuggled them out of Washington to Spindrift to escape the deadly electronic mind reader that had imperiled the scientist for weeks.

There was no disagreement. On the contrary, Jan Miller asked excitedly, "What's the matter with right now?"

"Nothing," Rick said with a grin. He went to the telephone book and found the long-range dialing code for Washington, then dialed Steve's special number directly. In less than half a minute he had the agent on the phone.

"Steve? What a break to find you in! This is Rick." He swiftly outlined the events of the past few days, ending with the discovery that the bag contents were radioactive. He concluded, "I know this isn't a case for you, but we hoped you might help us to identify the stuff from the bag and get a better measure of how active it is."

Steve considered. "Know where Falls Church airport is?"

Rick had used it for a landmark on the way to the farm. It was a small private airport west of Washington near the city of Falls Church. "I know where it is."

"All right. You're only a few minutes flying time from there. It's now two thirty. Be there at four. I'll have a man meet you. Bring the sample."

Rick thanked the agent and hung up. He reported that Steve would send a man to the airport at four o'clock.

Scotty asked, "Is the field dry enough for take-off and landing?"

"Sure. I hope Steve has a real expert he can send. If we can identify this stuff, it may give us a clue to what's going on here."

At Barby's request, Rick and Scotty took the girls along for the short ride. Steve's man walked to the plane as they rolled to a stop on the Falls Church strip. He introduced himself as Don Baxter, then opened the suitcase he carried. "Let's see what you have."

He produced a field-survey instrument and held it over the bag Rick carried. The instrument's meter showed a reading at once.

"Gamma," Baxter stated. "Now let's try for alpha and beta." He opened a shield on the bottom of his instrument and checked the sample again. The meter failed to respond. "No beta. That's interesting." An inner shield was slid out of the way and the instrument held to the bag. The meter responded.

Baxter nodded satisfaction. "Alpha and gamma. No beta. That means this stuff is not a fission product."

He studied the powder and rubbed a bit between his thumb and forefinger. He asked, "May I have the bag?"

"Sure," Rick agreed readily. "What is the stuff?"

Baxter took the cement bag and folded it neatly,

then he took a plastic bag from his case and put the cement bag inside. "I can't be sure," he said. "About its precise identity, I mean. But it seems to be pulverized ore, and my guess would be carnotite. Don't worry about the radioactivity. You could live in a house made of this stuff and it wouldn't be dangerous. The level of activity is very low. I suppose you have no idea where the sample came from?"

Rick shook his head. "Where does carnotite come from, usually?"

"The Colorado Plateau, for the most part. There are other deposits, but none around here. This stuff was almost certainly imported. Have you any idea why?"

"Not the slightest. It's a complete mystery."

Baxter nodded. "Well, that's all I can do for now. I'll analyze the sample and let Steve Ames know exactly what it is, but I'm betting on carnotite. If you find a few hundred tons of it, you can sell it to the Atomic Energy Commission. So long."

The expert tipped his hat to the girls and walked to his car.

"What was that all about?" Barby demanded. "You and Scotty seemed to know what he was talking about, but it was all Greek to Jan and me."

Rick explained on the way back to the farm. "There are four main kinds of radioactivity. They're called alpha, beta, gamma, and neutrons. Our sample has alpha and gamma. That means it doesn't come from either bomb debris or from a reactor, because fission takes place in both, and there is almost always beta

activity as well as gamma in the products of fission. But some isotopes of uranium and thorium have little beta, with some alpha and gamma, so Baxter concluded we had powdered uranium ore. There are many kinds of ore. Pitchblende is the best, but carnotite, which is a gray rock with yellowish streaks, is also good ore. Got it now?"

Jan Miller asked, "How do you know all this, Rick?"

The boy chuckled. "From associating with your father and mine, not to mention Weiss, Zircon, and the other scientists. They talk and Scotty and I listen. Also, Dad has a lot of books on atomic energy, and some of them are simple enough for me to read."

The Sky Wagon was over the Miller farm in a very short time, but before landing Rick made a swing of the area. The young people readily identified the mine and picnic grounds, and Rick pointed out the quarry into which he had tumbled.

Scotty said, "Something's been bothering me. If the Frostola man is new in this area, how could he have known the terrain well enough to lead us on that wild-goose chase?"

"He's new, but not that new," Rick pointed out. "He's had weeks in which to study the lay of the land. Besides, he does his haunting at night—if he's the one—and he roams the fields near the mine. He must know his way around."

"You're right," Scotty assented. "Now tell me this: why did he take the cement bags?"

"To keep us from finding out that they didn't con-

tain cement," Rick said. "It has to be the reason. That means he knew about the bags, and maybe he even buried them. He didn't bury them deep, because who would think anything of a bunch of cement bags, except a pair like us? Then, when he saw they had turned up, he collected them and took them somewhere else. The bags we found this morning may even be the same ones, although I think they're a second set. He'd hide the first set better than he did at first."

"Your language is confused, but I get your meaning." Scotty grinned. "Okay, detective. Set us down. It's suppertime."

Rick swung into his landing pattern. "Anyway, we've made progress," he commented with satisfaction. "We started with just a ghost. Now look what we've got!"

CHAPTER XI

The Ghost Reappears

BELSELY, the tenant farmer, had no difficulty in establishing a connection between Jethro Collins, real-estate agent, and the Frostola man. He made a quick trip to town on the morning following the flight to Falls Church, and reported that the ice-cream vendor was renting a room from Collins.

"No doubt about that connection," was Rick's comment. Then, because they had not talked to Belsely at any length, he questioned the farmer about the appearances of the ghost in the fields nearby.

"I've seen him four or five times, not counting the night you chased him," the farmer said. "Funny thing about the night he got the alarm going on your plane."

"What was funny?" Scotty asked.

"He was alone."

"But he's always alone," Rick exclaimed.

"Nope. He's alone at the mine, but when he walks the fields he has some of his men with him. Sometimes one, sometimes two or three. Only saw him alone that once—the night you chased him."

This was a new angle. Rick and Scotty looked at each other, puzzled.

"You've seen the others?" Scotty asked.

"Sure have. Not close to, you can bet. Got no wish to tangle with spirits, not me. But I saw them. They walked in the cornfield on top of the mine hill, and they walked in the field where your plane is. They was lookin' for somethin'."

"How do you know?" Rick demanded.

"They'd walk, then stop, and bend over. Like they were searchin' the ground. Bet one of 'em lost a head and is huntin' for it."

"Did you see where they came from, or went to?"

"Not me. I got curiosity, but not the kind that killed that cat they tell about. Like I say, me and spirits don't mix, none to speak of."

Rick pondered the information. "Are these ghostly walks at nine o'clock?"

"No. Mostly around midnight."

Rick turned to Scotty. "What do you make of that?"

"Nothing," Scotty replied. "Not a thing. You say you've seen as many as three men plus the Blue Ghost?"

"That's correct. None of them shine like the Blue Ghost himself, though. Most curious thing I ever saw was the night they pulled a wagon, collectin' the invisible dead from the battlefield."

Rick's hair had an impulse to stand on end. The calm, factual way in which the tenant farmer piled mystery on mystery was incredible.

"You mean you saw ghosts pulling a ghost wagon?" the boy asked incredulously.

"Like I said. More a cart than a wagon, I suppose you'd say. They hauled it back and forth, and the mist trailed out behind it. Once in a while they'd stop and gather and look at the ground. Must be they were searchin' for their dead. Don't know why else they'd need a wagon. And that Blue Thing leadin' the way every time. Up and down, back and forth."

Scotty asked, "Where were you while all this was going on?"

"In the orchard, scared pink, but not so scared as curious."

A man of real courage, Rick thought. Believed in ghosts, but had the nerve to watch them in action. "Mr. Belsely, you said none of them shone like the Blue Ghost. Did the others look solid?"

"They were dark shadows, that's all. No moon to see by, or at least not enough. Couldn't make out what they looked like."

"Has anyone else seen them in the fields?" Scotty wanted to know.

"Sure enough. Two or three that I know of, maybe more."

The tenant farmer paused, then asked a question of his own. "Why are you so interested in this new ice-cream man?"

Rick considered. "He interested us," he said finally. "He's not a Virginian. And he didn't seem to know much about the ghost."

Belsely's comment brought Rick's carefully built

up assumptions tumbling down around his ears. "Oh, he knows about the ghost, all right. He saw it once that I know of, when he was sellin' ice cream to the girl campers." The farmer added, "I was standin' right next to him at the time."

Rick looked at Scotty helplessly. "Thank you, Mr. Belsely," he said unhappily. "You've certainly given us plenty to think about!"

The boys watched as the tenant farmer walked up the road to his own house, as solid and dependable as the very earth he walked on. There was no arguing with what he had seen, only with his interpretation of it. Clearly, Rick thought, he had seen figures in the fields on several occasions. But what had the figures actually been doing?

"Don't be too discouraged," Scotty offered. "The ice-cream man seeing the ghost doesn't mean he isn't involved. Wasn't the girls' picnic the first time the ghost made a public appearance? He may have been checking on the way the ghost looked."

"What do you suppose Belsely was doing there?" Rick asked.

"Probably just wandered over to see what was going on. I've noticed people are pretty casual about the affairs over there. No reason why Belsely wouldn't take an evening stroll to see how the party was going."

"We'll keep our plan," Rick decided. "It's the only lead we have, so we'd better use it."

By the time the Sons of the Old Dominion started to arrive for the annual feast, the boys were in their

chosen position, upstream from the mine at a point where they couldn't fail to see all who traveled the road, but where no one could see them through the thick screen of foliage.

They had applied insect repellent liberally, but the insects swarmed around them anyway, although bites were few. They lay quietly and watched car after car arrive, but without seeing a familiar face.

During a lull in the traffic Rick asked, "Do you suppose we got here too late? He may have come earlier."

"I doubt it. Besides, where would he have parked his scooter? It isn't anywhere between us and the mine because we looked, and I doubt that he'd walk any farther than this."

Rick had to agree that it wouldn't make much sense to park the vehicle any farther away than the spot they had selected from which to watch.

The traffic ceased. All Sons of the Old Dominion apparently had arrived, and all were presumably feasting on good food. It was only eight o'clock; the ghost wasn't due for an hour. Rick thought an hour was probably more than the ghost producer needed to get ready for his appearance. Only a few minutes might be needed. That meant he and Scotty would have to wait until a few minutes before nine, to be sure no one slipped by.

One late arrival roared past as they waited, and then all was quiet. At ten minutes to nine Rick admitted defeat. "Either he isn't coming, or he got there through the fields. Let's go see if he shows up."

As they hiked down the road, ears attuned for a

motor vehicle behind them, Rick explained his theory of ghost production to Scotty. "There's only one way a transparent spook can be produced, and that's optically. In the movies they use a double exposure. The only way to produce an optical image on mist is with a projector of some kind."

"Spook projector," Scotty agreed. "Only where is this projector located?"

That, Rick pointed out, was the prize-winning question. "All we can do is keep an eye open for the projector beam."

"Both eyes," Scotty corrected.

It was one minute before nine when they arrived at the mine entrance. The Sons of the Old Dominion were still eating, but there was a lack of noise or joyousness that made Rick aware that the Sons knew about the ghost. He saw groups facing the place where the ghost would appear.

The boys were in front of the mine entrance. By unspoken agreement they moved to a position directly in front of the pool. If the ghost appeared, it would be almost over their heads. The shelf was too high for them to see into the water, but they were in a position where any human activity couldn't possibly be overlooked.

"On your toes," Scotty whispered. "Let's rush it while the Blue Ghost is still there."

Rick swallowed hard. In spite of his conviction that a human agency, and not a supernatural one, produced the Blue Ghost, he didn't care much for rushing right into the apparition. In fact, he didn't like it

at all. The mist had felt clammy the first time, even though no harm had come to them. But, he told himself sternly, Scotty was right. They either had faith in their assumptions or they didn't.

"Wait until the show is almost over," Rick whispered.

A voice from behind them called, "Better get out of there, you two. That's where the ghost appears."

The boys turned to reassure their well-wisher, and in that moment a sigh went up from the crowd. Rick heard a sudden splash, and then the white mist was rising, billowing almost over their heads!

He watched, fascinated and scared, and saw the Blue Ghost appear. The apparition was elongated from Rick's viewpoint, but the act was the same. The boy saw no sign of a projector beam, no sign of any human agency, and the lack of both turned his knees to water. He was close—very close—yet he could detect no sign of human origin in the thing overhead. Horror swept through him. Had he been wrong, he and Scotty?

His pal's hand fell sharply on his back. "Let's get him, boy! Let's find out for once and all!"

Somehow he got his legs moving. He and Scotty went up the steep slope, scrambling right toward the thing that was now holding out bloody hands!

They were in the mist! Rick sensed the blueness around him, and with sick horror realized that the ghost continued his act as though they were not even there.

Scotty yelled, and in the same instant sharp pain

swept across Rick's face. Bitter, terrible cold encompassed him, turned the skin on his face rigid, seared his eyeballs with cold so intense it was like burning heat. He staggered and fell, hands clutching his frozen face. He tried to yell for help and couldn't. He rolled down the hillside that he had climbed seconds before, and Scotty's falling body crashed into him, knocked the breath from him.

And overhead, the vision of the Union cavalry officer, face distorted in agony, faded slowly from sight, leaving only the icy, billowing mist.

CHAPTER XII

The Dead Water

HANDS lifted Rick and Scotty to their feet and voices demanded to know what had happened. Other voices berated them, calling them a pair of young idiots for rushing a ghost like that.

Rick staggered in the grip of the supporting hands. His heart was pounding and there was a constriction in his chest. Tears streamed down his cheeks as his tear ducts spouted fluid to protect his eyes from the now-vanishing cold. His cheeks felt numb, but sensation was returning.

At last he regained his equilibrium and found his handkerchief. He mopped his face and suddenly realized that his face was flushed, as though with fever. The sensation of burning cold was gone. He took a deep breath, grateful to be nearly normal again.

Scotty was also back to near normal. To the questions from the surrounding circle of Sons of the Old Dominion they could only say that they didn't know what had happened.

"Suddenly our faces froze," Rick explained shakily. "At least mine did."

"Same here," Scotty supplemented.

"It was like the cold of . . . of . . . I don't know, really. It was cold, but like nothing I've ever experienced before. The shock was so great I just sort of crumpled and fell."

"Whatever made you rush right into the ghost like that?" a burly man wanted to know.

Rick shrugged. "We didn't think the ghost was real, and we wanted to see how it was produced."

"Do you believe it's real now?"

The boy shuddered. "I'm a whole lot closer to believing it," he admitted.

"At least we won't try football tactics on it again," Scotty added.

Seeing that the boys were all right, the group dispersed. In a few moments they were alone. Rick shook his head hard, to clear it. "Now where are we?" he asked.

Scotty laughed mirthlessly. "I'm glad you asked that. I'd be gladder if you could answer it."

"One thing more and I'm ready to call quits," Rick said. Common sense told him to beat a path to the Millers, but he was stubborn. He wasn't giving up yet. He searched until he found a coke bottle, then taking his nerve in both hands he climbed up to the pool. He let the bottle fill with spring water then rinsed it. When he was satisfied it was clean enough, he filled it from the pool—the same pool from which the ghostly mist had appeared only short minutes before.

Only then did he and Scotty leave the picnic

grounds and proceed home to the Miller farmhouse.

The Millers and the girls were waiting. One look at the boys' faces and they knew something had happened.

Jan Miller said with quick intuition, "You're hurt!"

"Not permanently," Rick reassured her. "For a while we wondered, but it's okay now."

The Millers and the girls listened to their recital with mixed horror and relief that the effect of the cold had vanished so quickly. Dr. Miller's brows were knit as he tried to puzzle out what had happened.

"You saw no projection beam, I assume?"

"Not a trace," Rick said emphatically.

"You were actually in the mist when this cold effect hit you?" Dr. Miller asked.

"I was," Rick agreed. "How about you, Scotty?"

"Same. I was groping around trying to find something to get my hands on. I was actually in the pool of water. Rick was on the edge of it."

Dr. Miller considered. "Even if your assumption about dry ice is correct, Rick, that wouldn't explain the cold effect. If one touches dry ice, it is cold enough to cause a burning sensation, but had dry ice been used on you it would have taken chunks of it in contact with your skin. You felt nothing solid, I assume?"

Both boys shook their heads.

"Then we can rule out dry ice. I can't imagine what hit you."

"The Blue Ghost," Barby said, and shuddered visibly. "This ought to prove it, I guess."

Rick admitted it. "Ought to is right, but I'm stubborn enough to keep looking for a rational explanation. I got some water from the pool. Anyone want to look with me?"

They all did, and followed Rick to the kitchen. He set up the microscope and plugged in the substage light, then found a well slide and placed a drop of water on it. But examine the drop as he would, using the most powerful magnification, he could see nothing but a bit of brown debris that seemed to be a thread of withered alga.

He took another drop from the coke bottle and tried again with similar results. He shook the bottle and placed a third drop on a clean slide.

Rick focused the microscope on the drop of water. Yesterday—or was it the day before? He couldn't remember clearly he was so tired—the rock basin had been literally swarming with paramecia and other forms of life. Today, following the appearance of the ghost, the water from the basin was as devoid of life as the planet Jupiter.

He moved the well slide from side to side, bringing different parts of the drop under his lens. There was a tiny wisp of vegetable matter he recognized as a dead bit of Riccia, and a few black threads of algae.

Rick shook his head in bewilderment. "Whatever the Blue Ghost is," he stated, "it's a killer. The mob we saw is gone."

Dr. Miller took over the instrument and confirmed Rick's findings. "The water is dead," he said at last. "I don't know how useful it is to know that, but I

can't imagine that a supernatural agency would bring death to millions of microscopic creatures. Yet, if it isn't supernatural, how is it done and who does it?"

"I've never seen such hard people to convince of anything," Barby declared. "All the evidence points to a real ghost, it seems to me. But you keep trying to prove something else and you don't get very far."

"We get as far as dead water and radioactive cement bags that don't contain cement," Rick pointed out. "For a while tonight I was about convinced that the ghost was supernatural, but I'm still going to be a doubting Thomas, at least until we run all leads into a dead end!"

CHAPTER XIII

The Night Watchers

Rick couldn't sleep. He kept trying for a comfortable position, but the hitherto excellent bed suddenly seemed full of lumps. His pillow wouldn't behave, either. It seemed determined to lump up and deprive him of sleep.

His body was tired enough, but his mind kept worrying the problem of the Blue Ghost endlessly, going over incidents and details, searching for a meaning, a clue that would lead to a conclusion.

What was the reason for the Blue Ghost? If he could only figure that much out the rest would follow naturally. If the assumption that the ghost was man-made was correct, there had to be some reason for the apparition.

So far as he knew, the ghost had had only one effect, and that was to reduce drastically the use of the picnic ground in front of the old mine. According to the Millers, the grounds were in constant use most years, with family parties, group affairs, and young people spending considerable time in swimming, eat-

ing, ball games, and all the other amusements of people who sought the coolness of trees and water to escape the Virginia summer heat.

Now use of the grounds was restricted to affairs of long standing that it would be inconvenient to change or to cancel.

That was a definite effect, he admitted to himself. But who could profit by it?

There was only one possible clue, and that lay in the midnight prowlings of the Blue Ghost and his varying number of companions. Turning the picnic area into a forbidding place, a haunted ground, would give the ghost and friends ample opportunity to roam the upper and lower fields without interference.

Only, why roam the fields?

Somehow, the radioactive dust in the cement bags must tie into it, but Rick couldn't imagine the connection. He thought of a secret uranium strike and rejected it. Empty bags pointed to something gotten rid of, not something gained by a discovery.

The thought was intriguing. If he assumed the bags had arrived full, what had happened to the contents? He tried to think of uses for the powdered ore and couldn't. Even if he could imagine a secret processing plant to extract the uranium for some purpose, there wasn't enough. A sufficient quantity of ore to provide even a gram of uranium metal would mean literally thousands of bags and they had found less than a dozen.

Of course there was the cart Belsely had seen. Rick

couldn't credit the farmer's notion that the ghost soldiers had been collecting ghost bodies of the long-dead. But what had the cart been doing? The very idea of a cart led to the idea of something too heavy to be carried without mechanical aid. What? Bags of radioactive ore dust?

He was still tossing in his bed and chewing the data fine when the dogs began to bark. He listened. The barking was far away, probably a mile or more. There were farms on the road to town, and probably all of them had dogs.

Scotty spoke in a whisper. "What makes dogs bark at night?"

"Maybe a fox," Rick replied.

"Or a ghost?"

Rick sat bolt upright. "Maybe!"

Scotty swung to a sitting position on the side of his bed. "I've been listening to you twisting and turning for an hour. If you're going to keep me awake, it might as well be useful. What say we go look?"

Rick looked at the luminous dial of his watch. It was past midnight. "No chases ending in quarries?"

Scotty's chuckle was low. "No chases. Listen a minute!"

Rick held his breath, and heard what Scotty's keen ears had detected. There was the sound of a car somewhere far away. He couldn't tell the direction, but he was sure it was not the road from town because the bedroom windows opened on the town side of the farmhouse.

The night was clear and still, and sounds would

carry great distances. The car might even be on the main highway, about five miles away.

"Let's get going," Rick said softly. He fumbled for his clothes on the chair at the foot of his bed and dressed quietly. Scotty was doing the same on his own side of the room.

They checked flashlights, then started down the stairs. The treads creaked noisily, as is the case in old houses, and Dr. Miller's voice stopped them.

"Going spook hunting?"

"Yes, sir," Rick replied softly. "We're going to see why the dogs are barking."

"No chases," the scientist warned. "If you should see anything, stay away from it. Watch from a respectful distance."

"We will," Rick promised.

Outside, the night was lighted only by stars and a crescent moon. Trees were dark shapes against the lighter darkness of the night as the boys made their way through the orchard. They headed for the plane, intending to stop at the edge of the orchard to reconnoiter.

The field before them stretched dark and empty to the trees along the creek, except for the angular bulk of the plane. Rick watched and listened with every sense alert. Insects hummed now and then, but that was all.

"Let's get to the tree belt," Scotty said in a whisper. "We can watch both fields from there."

"Okay." Rick led the way at a half trot that covered ground rapidly. In a few minutes they were

across the creek and among the trees. They slowed their pace, stopping now and then to listen. The dogs were still barking, but the noise came from far away, on the other side of the hill in which the mine was located.

Scotty took the lead as they approached the picnic grounds. He was noiseless as a shadow, and Rick tried hard to step exactly in his footprints to avoid any noise.

Using the great oaks for cover, Scotty moved to the picnic grounds, among the tables and stone cooking pits. Suddenly he took Rick's arm and squeezed. Rick stopped instantly, ready for whatever action was indicated.

Scotty put his lips to Rick's ear. "Look around the tree, on top of the mine in the upland cornfield. Be very careful."

Rick moved into position, then with extreme caution he peered around the protecting tree. The first thing he saw on the hill was the Blue Ghost, not in his apparition form, but as the human-headed light they had chased. Then he realized that he was also seeing a form under the light, a human shape silhouetted faintly against the dark sky!

He choked back an exclamation. There were two other shapes, unlighted, but clearly human. This was what the tenant farmer had seen! But what were they doing in the cornfield? In a moment it became clear. The three were coming his way!

Scotty squeezed his shoulder and pointed up. Rick realized suddenly that they were hiding behind

the oak in which they had watched unsuccessfully for the Blue Ghost. He jumped for the lowest branch and quickly hauled himself into the protecting foliage. Scotty was close behind him.

Through openings in the foliage they saw the Blue Ghost make his way down the hillside with his two companions, saw the three pause at the basin in which the ghost made his public appearances. Rick shuddered as he heard soft, ghostly laughter. He was convinced that he watched three men, but the memory of the bitter, burning cold on his face was still too fresh and green not to feel a reaction.

The ghostly trio continued down the slope to the picnic grounds and turned to the road that led to the bridge. Rick would have given much for enough moonlight to see details, but he could see only the three vague shapes. He thought the figure with the softly lighted apparatus on his head carried something in one hand, but he wasn't sure.

Not until the trio passed out of sight behind the trees did the boys descend from the tree, then they paused for a whispered consultation that couldn't have been heard three feet away.

"They must be heading for the field where the plane is parked," Rick guessed. "We want to keep an eye on them."

"That we will," Scotty assured him. "Follow me, old son. We're making real progress tonight!"

Scotty led the way through the tree belt to the bank of the creek. He paused in the trees long enough to be sure the ghost trio had crossed the creek, then

picked positions behind the earthworks erected by Confederate soldiers long ago.

Rick watched the ghosts—for he thought of them by that useful term even though he now knew they were mortal—as they walked slowly across the field. He saw them pause, and saw the dark figures shorten as they bent over. He took a bearing on the spot, using the dim shape of his plane for one reference and the bridge for another. He thought he could locate the position again by daylight.

In a moment the three moved on again, while Rick watched, puzzled. He felt Scotty move and put his head close to hear what his pal had to say. "They had to come from somewhere, and I suspect it was by car. They didn't come up the road to town, so they must have used the road in the valley on the other side of the hill. I'm going to take a look. If there's a car there, I can at least get a license number. You watch 'em. If I'm not back by the time they cross to this side, don't worry. I won't get caught. Just go on home and wait for me."

Rick whispered an okay, and Scotty melted into the night with the noiseless skill that Rick so much admired. Then he turned his attention to the ghosts once more.

Rick counted five stops in various parts of the field. After the last one, the trio turned, recrossed the bridge, moving briskly, climbed the hill, and disappeared into the cornfield. Mission accomplished, apparently. What had the mission been?

According to Belsely, this happened each time, ex-

cept for the occasion when a cart had been used. What were they hunting? Or, if they weren't hunting, what were they doing? Rick felt frustrated. To be so close, yet to be unable to see anything but vague shapes in the darkness!

Tomorrow he and Scotty would search both fields in an effort to find what the Blue Ghost sought, or to try to figure out what he and his friends were doing.

Scotty caught up with him as he was crossing the field by his plane. The dark-haired boy was triumphant. "They had a car, all right, and the registration was in a container on the steering wheel. I've got all the dope. Probably I shouldn't have done it, but I sneaked a quick look at the name. Can you imagine what it is?"

"Jethro Collins?"

"Nope. It's Hilleboe. Dr. Miller's next-door neighbor!"

CHAPTER XIV

The Cold, Cold Clue

THE boys were late to breakfast the following morning. They had fallen into bed, pleased and exhausted, and the noise of the household stirring had failed to waken them.

Mrs. Miller greeted them as they came downstairs. "I hear you were ghost hunting again last night. Did you find any?"

"I'll say we did," Scotty replied. "Where is Dr. Miller?"

"Right here," the scientist said from the living-room doorway. "And I have news for you. Collins called this morning and renewed his offer. I told him I'd think about it and let him know later. And Steve Ames called. The powder is definitely carnotite, and it matches ore produced on the Colorado Plateau. Steve has reported to the Atomic Energy Commission, and they'll be able to track down its origin without too much difficulty, since no two ores are precisely alike. Now, how did you two do last night?"

The two girls came into the kitchen in time to hear the question, and Rick almost hated to give the an-

swer, knowing that it would disillusion them, and particularly Barby.

"We trailed three ghosts," he said. "All human."

Scotty added, "And one of them was named Carleton Hilleboe. At least that was the name on the registration of their car."

They told the story in detail while Mrs. Miller and Jan fried eggs and bacon and made toast for their breakfast. Barby listened quietly, but if Rick had any idea she would be convinced, he was mistaken. When the recital ended she pointed out, "There's no reason why mortals shouldn't take advantage of a ghost. You still haven't proved that the ghost at the mine isn't real, or how the cold almost knocked you out last night."

"True," Rick had to admit. "We're not making much progress there."

Over breakfast Dr. Miller told them about the Hilleboes. "They were one of the big families in this vicinity two or three decades ago. They had the biggest house in this part of Virginia, but it burned down about twenty years ago and the kids moved away. There is no house on their land now. They rent some of the land to tenants. Carleton Hilleboe is the eldest son. He's in a business of some kind in Washington. He either controls or owns the property, I'm not sure which."

"Including the upland cornfield above the mine?" Rick asked.

"Yes, and all the property to the east of ours for a mile or two."

"Could he be the mysterious buyer Collins is acting for?" Rick asked.

"It's possible, although why he would want our share of the mine and the field opposite is beyond me. I think a talk with Collins is in order. If you two want to come to town with me, I think I'll beard him in his den. I've no intention of selling, but I won't tell him that."

On the way to town the boys agreed it would be best for Dr. Miller to talk with Collins alone. He obviously didn't like young people—at least them—and he would be more apt to confide in Dr. Miller if the scientist interviewed him alone.

The scientist agreed. "Why don't you two wait in the drugstore? You can have a coke or something."

Dr. Miller parked the car in front of Collins' house and the boys crossed the street to the drugstore. Although it was early in the day, both ordered a dish of ice cream. They were eating it and exchanging small talk with the druggist when the Frostola scooter pulled up outside. Both tensed as the Frostola man came in, but he greeted them impersonally and turned to the druggist. "I'd like a tin of aspirin, please."

"That infected hangnail still bothering you?" the druggist asked sympathetically.

"No, it's okay today," the peddler answered swiftly. "I've got a slight headache, that's all."

He paid for the aspirin, accepted the druggist's offer of a glass of water, downed two pills, and left.

"Seemed in a hurry," Rick commented.

The druggist nodded. "Seemed so. He usually stops to pass the time of day. Had a terrible time yesterday with an infected hangnail. They can be pretty painful. I tried to sell him a new analgesic ointment, but he insisted on methyl chloride. He had an old refillable prescription from some doctor over in Arlington. Said he got it because infected hangnails bother him all the time. Lucky I had some. It used to be used all the time for pain from superficial wounds, but it went out of style. He bought a whole pint. Enough to last for fifty hangnails. Told him he didn't need it, but he insisted."

Rick said thoughtfully, "His hands seemed to be all right today. No bandages."

"All he had was a plastic-tape bandage around his thumb yesterday, anyway. Guess the infection must have cleared up."

"What's methyl chloride?" Rick asked.

"A highly volatile chemical. It's not a painkiller in the usual sense, like aspirin. You spray it on the area that hurts, and it evaporates in seconds. You know what that does."

Rick did! And suddenly last night's events were perfectly, transparently clear.

"Evaporation cools the surface," Rick said for Scotty's benefit. "The faster the evaporation, the faster the cooling. This methyl chloride must act pretty fast."

"It does," the druggist agreed. "That's how it kills pain, partly. It chills the outer layer of skin almost instantly."

CHAPTER XV

The Missing Facts

DR. MILLER'S conversation with Jethro Collins was something less than satisfactory. He told the boys about it on the way home.

"I told him bluntly that I was suspicious about his offer because the property he wants to buy has little value as farm land and contains no timber or anything else of commercial value. I told him I wouldn't consider an offer until I knew what the land was to be used for."

The scientist chuckled. "That was my way of putting him on a spot, of course. But he refused to be cornered. He replied that his customer wanted the land for reasons of his own, which it was not Collins' place to divulge. He assured me the land would not be used for commercial purposes, so my own property would be quite safe.

"I replied that I needed more assurances than his word, and demanded to know the identity of his client. I pointed out that the name would become known during the process of settlement anyway, un-

less his client proposed to use a dummy of some sort in which to register the deed to the land."

"But he wouldn't tell you the name," Rick guessed.

"Correct. My guess is that he would use a dummy of some sort, perhaps even Collins himself as nominal owner of the land."

Scotty offered, "People don't buy land unless it has some value for something. Can't you think of any way in which your land has value?"

"I'm afraid not. I've tried to puzzle it out, with no success. The field itself is all right, if fertilized and limed, but the rest is worthless for farming. There isn't even an access road. The road leading into the picnic area and across the creek to the house is my own property. It's a private road."

Rick kept wondering about the radioactive ore. "Could there be any minerals worth mining?"

"Not even that, Rick. Except for the igneous outcropping in which the mine is located, this whole valley is sedimentary rock, probably for a depth of several hundred feet. Even the foothills are the same kind of rock. They were moved upward from what is now the valley during a shift in the earth's crust. The faults in the formation show this clearly."

"The whole business is tied together somehow," Rick said with conviction. "So far we've been trying to follow threads. We come across other threads that seem to run crossways, but that's because what we're trying to see is a whole piece of cloth, not just the threads. So far we don't know if the cloth is a whole suit or just a handkerchief."

"The metaphor is a little obscure, but I get your meaning, and I agree." Dr. Miller drew to a stop in the driveway of his home. "Suppose we have a late morning bit of refreshment and use our heads instead of our legs?"

At the scientist's request, the girls produced a snack of toast and jam with iced tea and soft drinks. Mrs. Miller begged to be excused from the council because of housework to be done, but the others gathered in the living room to explore the mystery from every angle.

Dr. Miller led the discussion. The scientist was obviously intrigued by the problem, even though he had let the boys handle things in their own way. As he explained with a twinkle, "Rick and Scotty have reputations as detectives to maintain. I'm a poor, simple physicist. No one expects me to solve this mystery. So the boys have to be given first chance to bring the ghost to bay."

Barby sniffed. "You're all pretty sure the ghost is a fake."

"And you're not," Rick observed. "I guess we'll have to put him in a bottle for you before you'll believe it."

"Peace," Dr. Miller interposed. "Each to his or her own opinions. We're here in pursuit of facts, not fancies. Rick, you're first at bat."

Rick considered. What were the most important facts? They had been working on assumptions, but assumptions need proof before they can be accepted as valid.

"Well, I'm not sure I'm listing the facts in order of importance, but I'll try. First, the ghosts that walk the fields at night are humans."

Barby interrupted. "How can you be certain?"

"They looked human. We saw their silhouettes against the sky clearly enough to see their shapes, and they were human shapes." As she started to speak again, he held up his hand. "Whoa! Let me finish. Ghosts also have human shapes is probably your counterargument. I'm not arguing that ghosts don't really exist, but if they do, they are supposed to be sort of nonsolid, aren't they? Like the Blue Ghost at the mine. But the field ones were solid enough. No light showed through them."

"Not all ghosts are transparent," Barby insisted.

"She's got you." Dr. Miller chuckled.

Scotty spoke up. "Ghosts do not drive cars."

"And you've no proof the ghosts you saw in the field came from the car," Barby defended hotly. "Did you see them get in the car and drive away?"

Scotty held up his hands in surrender. "No. I passed them on my way back from the car."

"Evidence not sufficient," Dr. Miller said with a grin. "The ghosts may or may not be human. Your first fact needs more proof, Rick. Carry on."

Rick sighed. "All right. I'll start over again. First, we have uncovered cement bags that contained radioactive ore, pulverized into a fine dust. I'll amend that. The bags contain a small quantity of radioactive ore, which gives some reason for believing they were once full of such ore."

The group laughed. "Now you're on the beam," Dr. Miller approved. "State only what you know as fact and identify what you infer from the facts as inference or speculation."

"Glad you all approve. Second, we believe the Frostola man was interested in the cement bag Scotty carried. It is a fact that when we returned from town the cement bag that we put in the trash can, and the cement bags we left where we found them, had been removed. Because of the Frostola man's apparent interest, we are of the opinion he took the bags."

Jan Miller giggled. "You sound like a lawyer."

"I feel like one," Rick returned with a grin.

"Third, the Blue Ghost led Scotty and me on a wild chase that ended up with me dropping into the quarry. The facts are that the ghost somehow triggered the plane alarm. We will not argue whether or not a real ghost could have set off a purely physical, nonspiritual alarm."

Barby nodded soberly, but there was a twinkle in her blue eyes.

"Continuing with the facts of that incident, the ghost stayed ahead of us without difficulty. A real ghost could have done that, I suppose, but so could any person in reasonable physical shape who knew the terrain. Now, the ghost's light went off as he reached the edge of the quarry, or somewhere in the vicinity of the edge."

Rick looked at his sister. "I will stipulate that a real ghost need not have any reason for his actions. But a

person imitating a ghost would have had to turn off his light in order to go around the quarry, otherwise we would have seen that he made a detour. A ghost would presumably float right over the quarry."

"Ghosts do float," Barby agreed solemnly.

"Uh-uh. Since this one did not, and since it reappeared—or the light did—on the opposite side of the quarry, we believe there was a deliberate attempt to lead us into said quarry."

He paused and took a deep breath. "How am I doing, coach?"

Dr. Miller nodded approval. "Fine. See how easy it is to separate fact and conjecture?"

"So what do we conclude from this one event? We conclude it is reasonable to believe that a person, and not a spook, triggered the plane alarm and led us to the quarry. We speculate that the person did not know about the alarm and set it off by accident, probably while inspecting the plane, since we see nothing to be gained by sabotage. We speculate that the chase was to frighten us, not primarily to harm us, the reason being that we rushed the ghost during the ghost act and are therefore potentially dangerous. We reach this conclusion because the ghost picked a side of the quarry where we would land in the water, which is plenty deep by the way, and not on the rocks."

"Okay. Scotty, take over. I'm worn out from trying to be precise."

The scientist grinned. "Lack of practice, I'm afraid. If we all sought precision in our speech many of

the world's misunderstandings could be avoided."

"I don't know what we can say," Scotty objected. "We have few facts. We have only some observations. We can try to interpret our observations, but we can't prove them. For instance, there is the fact that we were given a bath of something by the Blue Ghost that seemed to freeze our faces. There is the fact that the Frostola man bought a quantity of methyl chloride. There is the fact that methyl chloride could have produced the effect we felt. But how can we say that it's a fact that the Frostola man somehow doused us with chemical?"

"You can't," Jan Miller agreed.

"So if we stick to demonstrable facts, we don't get far," the scientist concluded. "But can we settle for mere speculation?"

"No, sir," Rick stated. "But let's admit that speculation has its uses. After all, circumstantial evidence is permitted in court. Speculation can give us the circumstances that need to be proved, and that tells us where to put our efforts. I think that's fair enough."

"So do I," Dr. Miller agreed.

Rick arose. "Then we'll continue working the way we've been doing it. It's not the best way, but at least we're uncovering little items that can be tied together if we find just two missing facts."

"Like what?" Barby demanded.

"We go back to our assumption that the ghost is man-made. On this assumption, the things we need to know are *how* and *why* is the ghost produced?"

CHAPTER XVI

Trapped!

It was, as Rick said, time for action and not for words. He and Scotty set out to track down every possible shred of evidence. They armed themselves with flashlights, and Rick made sure he had his pocket lens, and they started out.

The first stop was in the field, to locate the places where last night's ghostly party had paused.

As the boys walked across the field toward the plane, Rick wondered aloud. "What did the ghost want with the plane?"

"Sabotage?" Scotty asked.

"Maybe. But if so, why?"

"Because he was afraid of what we might see from the air, maybe."

Rick considered. "It could be, I suppose, but we've examined the whole area from the plane. I didn't see anything suspicious or particularly interesting."

"Not a thing," Scotty confirmed. "But it might be a good idea to take another look."

"Okay. We can do it later this afternoon. Now, according to what I remember, the first stop the ghosts

made was right about here. Let's work like hunting dogs and see what we can turn up."

Rick dropped his handkerchief on a clump of bachelor's-buttons for a marker, then he and Scotty walked in ever-widening circles, scanning the ground for any trace of the ghosts.

Scotty's keen eyes saw the first sign, a heelprint in a bare place in the grass. The boys examined it. "Doesn't match anyone's shoes," Scotty said. "Not of our gang. Leather heels, a little worn, run down on the outside edge. You can see the nail marks. No rubber heels would make those marks."

There were other prints, now that they were searching closely. Clearly, three men had walked the field last night. But nowhere did they find a clue to what the men had searched for. There was no raw dirt, no impressions left where something had been removed.

"Fact," Rick stated. "Three men were here."

Scotty laughed. "This does not mean there were not also three ghosts who left no tracks."

Rick had to laugh, too. "Now what do we do?"

"Look in the upland cornfield."

They started the survey of the cornfield directly above the mine entrance, where they had first seen the three ghosts. Tracks were visible almost at once.

"We're lucky," Scotty said. "Even with the weeds between the rows there's enough bare ground so we can do some real tracking. Let's see how the tracks run."

As Scotty had predicted, the tracking was much

easier. A few yards into the cornfield they came to a gap where a few seeds had failed to germinate or the plants had died. It was a bare space, sparsely grown with weeds.

Scotty pointed to the three sets of tracks, and put his own feet in one set, while Rick did the same with another set. From the position of the third set it was clear that the three men had faced each other.

Rick said excitedly, "They paused and bent over. But over what?"

They scrutinized the ground minutely. It seemed normal enough. There was absolutely no sign that the earth had been disturbed.

Rick picked up a handful of soil and examined it. "Dirt," he said. "Plain dirt. Why was it so interesting to the spooks?"

"Try your lens," Scotty reminded him.

Rick did so. The lens showed the usual combination of mineral and organic matter of various sizes and colors. "I can't see anything unusual," he reported. "Maybe the lens isn't powerful enough. I'll take a sample and look at it under the microscope later." He found a scrap of paper in his wallet and folded a bit of dirt into it.

"Let's continue," Scotty urged.

They worked their way across the cornfield, following the tracks. Twice more they found places where the ghosts had paused to confer about something, or examine something.

Then, at the edge of the cornfield, they lost the tracks in a rank growth of weeds. Probably the ghosts

had trampled the weeds last night, but they had sprung up again and left no trace of the passage.

Scotty took the lead. "I'll show you where the car was parked."

They traveled through alternate weeds and hay to where the hilltop dropped away rapidly to a valley about three hundred feet below. This marked the end of the igneous outcropping in which the lead mine was located, Rick guessed. The hill was steep, and overgrown with blackberry bushes.

"I got caught a thousand times in as many feet last night," Scotty commented. "It's easy by day, but don't try it by night." He led the way through clear spaces between the thorny patches, always going downhill.

It wasn't long before Rick saw the road, if it could be called that. It was two ruts with grass growing between them.

"Doesn't look like U.S. Highway Number 66," he remarked.

"There's a man who thinks it is," Scotty replied.

Rick looked to where his pal pointed. The Frostola man was approaching on his scooter. The sound of the little motor was just audible, and Rick's first impulse was to duck, but Scotty said, "Too late. He saw us just as we saw him. Let's walk down to the road and make it casual."

They did so, and the peddler approached, bumping over the uneven surface.

"Howdy," he greeted them. "Where does this road go?"

"We don't know," Scotty replied.

Rick added, "We're strangers in the area."

"I'm pretty new myself," the man said cheerfully. "Saw this road and thought there might be a settlement where I could find some new customers."

"We don't know of any," Rick said.

"Looks like I might as well go back to town, then. Want a lift? You can hang onto the step behind me."

"No, thanks," Scotty replied. "We're staying just over the hill."

The Frostola man turned his scooter wagon, gave them a wave, and went on his way back toward town. The boys watched until he drove out of sight.

"There's an optimist," Scotty said. "Follows a pair of ruts, hoping to find civilization at the other end."

Rick grinned. "He certainly likes this part of Virginia. There's one thing about peddling Frostola here—"

"What's that?"

"No customers to bother you. It's easy to commune with Nature."

"Aye-aye. Does he look like a nature lover to you?"

"Now that you mention it, I've seen people who fitted the part better. We scared him away, that's for sure. But what was he doing here?"

Scotty considered. "If he wanted to reach the mine area without people noticing him, he could park his scooter here and walk over the hill."

"He could," Rick agreed. "But why would he want to reach the mine area?"

"Not to sell Frostola. That's for sure."

"Uh-uh. My guess is he has to reset the Blue Ghost."

"Reset it?"

"Sure. Think about it. The projector can't go on operating forever when a clock reaches nine, can it? It must need servicing and resetting."

"And loading with methyl chloride to squirt at us?"

"Too true." Rick had wondered about that. "But how does the chemical squirter work? Where is it? The projector must be close to the Blue Ghost, if the chemical came from the same place."

Scotty laughed. "You don't discourage easily, do you? We tried to find a projector beam the other night, remember? What did we get for it? A squirt in the face. No projector, no nothing."

"There has to be a projector, or an imagemaker of some kind," Rick insisted, "unless you're admitting the ghost is real."

"Where would it be located?"

"Very close, I'd guess. Hidden somewhere near the spring pool, batteries and all. It has to be, and I think we'd better spend some time looking."

"Starting where? Don't tell me—it has to be the mine."

Rick was already walking back up the hill toward the cornfield. "There's no other underground location in which a projector could be stored, is there? So let's get at it."

"Glad we brought flashlights," was Scotty's only comment.

They hiked in silence to the cornfield, pausing now and then among the corn plants to examine footprints. Thanks to the rain that had left the ground soft, there were plenty of them, but they told the boys no more than they already knew.

At the top of the hill above the mine they paused to survey the scene. Belsely was hauling a load of rock through the field near the plane, using his tractor and a stoneboat. The boys knew he was busy building a stone fence. He saw them and waved. They waved back, then went down the hill to the spring and its basin.

Again they examined the entire location with great care, and Scotty probed seams in the rock with his jackknife blade. The entire hillside in this location was cracked and seamed and the rock face above the basin was rough and irregular. Rick wondered if there had ever been an earthquake in the neighborhood or whether the settling of the earth into the mine has caused the cracking.

"Nothing here," Scotty said. "At least nothing I can see. We'll have to try the mine itself."

They had replaced the boards at the entrance, simply pushing the nails back into the holes from which they had come. They pulled the boards aside and saw footprints—and not their own!

"Visitor," Scotty said with excitement.

Rick noted the size of the tracks. "And a big-footed one, too. Makes our tracks look small."

Scotty pointed. "He came out again, whoever he was. Let's see how far he went in."

The tracks told the story clearly and quickly. The visitor had gone in about twenty feet, and had then returned to the outside. One glance told the boys why.

The mine was timbered, with uprights and overhead beams spaced about every ten feet. Where the visitor had stopped, the mine timbers were supporting a big piece—or many pieces—of the rock overhead. Rick guessed that the heavy rain, working through cracks, had loosened a section and let its weight fall on the overhead crosspiece. It was also clear that the timbers would not support the weight for very long. They were rotten, and wet with the constant seepage of water.

"Must have been one of the Sons of the Old Dominion who wandered in for a look," Rick suggested. "He saw it wasn't safe and went right out again."

"Something like that," Scotty agreed. "And it isn't safe. Those timbers would go if anyone breathed hard at them."

"Then let's not breathe hard," Rick said.

"Meaning that we're going in, anyway."

Rick pointed out, with what he thought was complete logic, that the timbers had held the roof up since the rain, and that collapse surely wouldn't take place in a minute or two. He concluded, "And if we're going to find any kind of clue to a projector, it has to be in this mine somewhere."

"Then let's not linger," Scotty said. "And for Pete's sake don't stamp your feet when you go by the tim-

bers. A little vibration would send them down for sure."

Rick asked, "What were the wind and the laughter the last time we were in here?"

"Imagination," Scotty replied. "Let's keep it under control this time."

"I'm with you. And ghosts don't blow out flashlights, so let's go."

They moved cautiously past the unsafe place, lights probing the tunnel walls for a sign of anything unusual or worthy of attention. Now and then they reached a bay where ore had been taken out, or a jog in the tunnel where the miners had lost the ore vein temporarily. They reached the spot of their penetration into the mine on their last visit and found the remains of their torches.

"No change. Thought they might have been chewed by ghosts," Scotty commented.

"Newsprint doesn't taste good," Rick replied. "Do ghosts have teeth?"

"Nope, just an icy breath. Do you remember any smell, by the way? When we got hit in our faces?"

"Something sort of sweet?"

"Yes. I wasn't thinking about smelling, and I didn't notice especially, but I sort of recall a nice odor."

Rick thought he remembered it, too. "We'll look up methyl chloride in the dictionary," he promised. "That will tell us if it has an odor."

The mine took a sharp turn. "They lost the vein here and had to chew out some rock to find it again," Rick pointed out. "Notice everything is on one level?

The timber had given away. They were trapped!

Must have been just one vein. It ran out and the mine closed down."

"Looks that way," Scotty agreed. "How far have we come?"

Rick hadn't kept track, but he estimated they were perhaps halfway under the hill. "This must end somewhere," he said. "Notice there isn't any water at all, not even seepage? I'm still baffled by that spring and the pipe."

They traversed another hundred yards in silence, flashlights constantly scanning the mine. There was nothing out of the ordinary, no sign of ghost, projector, or even of human visitation for dozens of years.

"We're on another wild-goose . . ." Rick began. He never finished, for sound suddenly reverberated through the mine, the sound of rock crashing downward.

Both boys turned and ran back toward the entrance, afraid of what they would find. Long before they reached it, billowing clouds of dust told them what had happened.

Their racing legs confirmed it as they came to a stop against rock that choked the tunnel from top to bottom.

The timbers had given way. They were trapped!

CHAPTER XVII

In Darkness

For one despairing instant the two peered at the fallen rock through the thick haze of dust, then Scotty snapped, "Back into clean air."

They retreated the way they had come. Rick clicked off his flashlight instinctively. They might need it.

When clean air was reached again they stopped and Scotty swept his flashlight beam over the rocky floor. "Pick a seat and get comfortable. We'll be here for a while."

"We won't get out of here by sitting down," Rick replied.

"No, and we won't do much until the dust settles, either. Relax and get cooled off. When the dust has settled a little, we can go back and see just how bad the block is."

Rick remembered the tons of rock above the timbers. The block had to be bad, he thought. There was plenty of rock there. Then, as he thought about it, he wasn't so sure. A pretty large area had shown

cracks, but perhaps only a layer had fallen. They might be able to dig out. Nothing to do about it but wait and see.

Scotty switched off his light and the blackness closed in. Rick shifted uncomfortably. Once before he had been lost in complete blackness like this, in the Caves of Fear. But that had been different; he hadn't been exactly trapped in the same way then, and the caves had covered miles under a Tibetan mountain. At least he knew exactly where he was this time.

He said, "We should have brought a picnic lunch."

Scotty chuckled, but didn't reply.

Rick said, "Suppose we can't get out?"

"We will. Dr. Miller will be hunting for us sooner or later. He couldn't miss the mine, especially with the boards off the entrance."

"Then all we need is patience and a tight belt."

"That's it."

The boys fell silent. Rick was cheered by Scotty's estimate of the situation. He closed his eyes, and for perhaps the hundredth time started mulling over the chain of events, searching for a clue to the two things they needed to know: how and why the ghost was produced.

But as he thought about it he wondered if perhaps they didn't know why. The ghost was a means of keeping people out of the area. It had succeeded to a considerable degree. There were no more night family picnics and swimming parties. There were only occasional long-scheduled events.

He explored the idea. The mine area was private property. To keep people out one would need only to post "No Trespassing" signs. But in all probability that wouldn't be suitable, because it would raise too many questions, and Dr. Miller would have to be let in on the secret of the ghosts that walked the fields.

But why keep people out of the area? To be sure, privacy for the conduct of secret operations was an obvious reason, only what were the secret operations, and why did they have to be kept secret?

He gave up finally. There simply weren't enough data on which to hang a conclusion.

"Think the dust has settled?" he asked.

"Could be. Suppose we go take a look. I'll use my light. Save yours."

They followed the yellow beam of Scotty's flashlight through the dark tunnel to the rockfall. There was still plenty of dust in the air, but it was bearable.

Scotty flashed his light on the timbers, then on the rockslide. One pair of uprights arose from the sloping pile of rock to a sound crosspiece.

Both boys knew what that meant. Rick put it into words. "If that's the set of timbers nearest to the ones that were bad, it means at least ten feet of rock on this side, and probably the same or even more on the other. A total of twenty feet of rock."

Scotty grunted. "One thing is for sure. We won't dig our own way out for a few days. I'm not even sure we can. We might collapse from lack of water if we try working real hard."

"But we can't wait for help from the outside," Rick

pointed out. "We can at least work while we still have our health."

"Can you work in the darkness?"

"I suppose we'll have to. The lights won't last long."

"Then let's get to it."

They retreated to an alcove and put their shirts in a safe place, then went to work in their T shirts. Lugging rocks would work up a sweat, and it was chilly underground. The shirts were for use during rest periods.

"Let's see how it goes," Scotty invited, and turned off his light.

Rick groped for a rock and found a good-sized one. He carried it back and promptly bumped into a wall and dropped it. Keeping a straight line was going to be a problem. He groped for the rock and found it again, but this time he tucked it under one arm, using the opposite hand to guide him along the wall.

"I'm on the right-hand wall," he told Scotty. "I'll return along the left-hand wall."

"Good system," Scotty approved.

It was, too. They passed each other in the dark and Rick was pleased, until he tripped on a rock and stumbled into the pile.

"We're going to have to count paces," he said ruefully as he nursed a bruised knee. "Say twenty paces up and twenty paces back."

"Better make it twice that," Scotty replied. "We can't pile all the rocks in one place. We'll have to spread them out."

"Forty it is," Rick agreed, and found another rock.

The work went on, gradually assuming the proportions of a dream—or a nightmare. Pick up a rock, tote it forty paces, drop it. Then thirty-five paces as the passageway got cluttered. Now and then they had to join forces to lug a particularly big piece.

Rick's watch showed him that two hours had gone by. "Let's take a break," he suggested.

"Okay."

Scotty turned on his light. They found their shirts, then went back to survey what they had accomplished.

One glance told them it wasn't much. They had cleaned out the passage up to the main slide, and that was all.

They looked at each other in the flashlight's glow.

"Got any earth-moving equipment in your pocket?" Rick asked wryly.

"Not a dragline or a clamshell," Scotty said. "We certainly didn't make much of a dent, did we?"

"At this rate we'll be here until Christmas," Rick said.

"Not that we'll need a Christmas tree."

"We could use the lights," Rick commented. "Let's keep plugging. I'm not so sure I need a rest after all."

"Might as well."

"Just sitting on the rocks will sap our strength, anyway," Rick pointed out. "We might as well work while we're still fresh. We can take five-minute breaks when we begin to tire."

"I'm with you. Tote those rocks."

"Let's use one light, too. No point in just clearing

the tunnel. We want to break through in as short a time as possible. If we use the light we can pull rocks from nearer the top of the slide."

"Sensible as usual. I'll prop my light so it shines on the slide."

Scotty did so, then both boys shed their shirts once more.

The rock hauling went faster even with the rays of the single flashlight. They took turns climbing the slide and throwing rocks down. The boy taking a turn at the bottom moved them out of the way.

"Watch it!" Rick yelled suddenly, and jumped away from a slide of rock. Scotty, who was back in the tunnel disposing of a big rock, asked anxiously, "Are you hurt?"

"No. Hand me that light, will you?"

Scotty carried the light to where Rick waited. Rick took it and shone it upward to where the slide had come from. He whistled. There was solid ceiling, but it was a yard higher than the rest of the tunnel ceiling.

He calculated quickly. "If this is typical, we have rock three feet thick, ten feet wide, and twenty feet long piled up in front of us. That makes six hundred cubic feet of rock."

"But it can't be typical," Scotty disagreed. "If three feet had fallen uniformly, it wouldn't have filled the tunnel. It must be much thicker right over the broken timbers."

"Not a very cheerful prospect, is it?" Rick had a vision of yards of rock ahead.

"I've seen happier prospects. But what can we do? Keep plugging is all, and hope it doesn't take long for Dr. Miller to locate us."

Rick looked at his watch. "No chance of that yet. It isn't even suppertime. It may be morning before Dr. Miller gets really worried."

Scotty chuckled grimly. "Our own reputation for being able to take care of ourselves is not helping us, either."

"I'll never go into a place without two entrances again," Rick promised.

There was a moment's shocked silence while the boys stared at each other. They spoke simultaneously.

"How do you know this has only one entrance?"

"How do we know this hasn't two entrances?"

They had never reached the end of the mine. For all they knew, it might only be necessary to walk out!

"We'll go see," Rick stated. "Right now."

"Didn't we ever ask about another entrance?" Scotty demanded.

"No, now that I think of it, and no one ever said anything about it."

"Maybe they never said anything because there isn't anything to say."

"No more assumptions," Rick said. "We can find out for ourselves. Get your shirt on and let's go."

They quickly dressed and hiked down the long tunnel to the point they had reached when the cave-in occurred. Rick paid more attention to the formation

than before, and found it was easy to trace the ore vein. Pockets in the walls showed where offshoots of the main ore vein had been located and dug out, but mostly the mine bored through the hill in one continuous tunnel.

"Funny they didn't take more ore out of the top," Scotty commented. "Looks like fairly decent stuff overhead and to the left."

"Not good enough, I guess. Refining was pretty primitive in those days. Techniques are better now, but there probably isn't enough good ore here to make new operations worth the expense of getting it out."

"Look ahead," Scotty said.

Rick had been examining the wall of the tunnel. He turned and looked to where Scotty pointed, and his heart sank. It was another rockslide.

"Funny," Scotty commented. "The tunnel goes uphill to the slide."

Rick saw that his pal was right. But the change in elevation of the tunnel didn't seem important compared to the prospect that now faced them. They simply had to go back and resume their rock hauling. There was no way of knowing whether the tunnel continued beyond the slide, or whether the slide itself was the reason the Civil War miners had gone no farther.

"I need a rest," Rick said, discouraged. "Let's sit down and take a breather before we start back."

"Okay. Douse the light?"

"Might as well. Your battery's getting low."

Scotty switched the light off and they sat down on the hard rock floor. Rick closed his eyes and breathed deeply. Plenty of hard work ahead. He might as well rest while he could.

Scotty spoke suddenly. "Plenty of good fresh air down here. Isn't that a little odd?"

Rick stirred. "Is it? I hadn't thought much about it. But I suppose the air ought to be stale and smelly."

"Wet your finger."

"Huh? Oh, okay." It was the ancient trick of using the cooling caused by evaporation of moisture from a damp finger to show the movement of air currents. Rick let out an exclamation. The air in the tunnel was in motion!

Scotty said with suppressed excitement, "Close your eyes. I'm going to light a match."

Rick did so, and saw the light even through closed eyelids because his pupils were fully dilated. He opened his eyes cautiously, squinting against the glare of the match. As the pupils contracted he saw that the paper match burned brightly, and that the flame flickered!

Scotty jumped to his feet, switching on the flashlight. "The breeze is coming from the slide!"

With one accord they rushed to the slide and began pulling rocks away. Clearly, the tunnel sloped upward at this point. The question was, did it emerge in a real opening, or only in a hole driven through for ventilation?

There was only one way to find out: move rock!

They sought for key rocks, those that would allow

other rocks to tumble down and out of the way.

Rick thought it was at least to their credit that they learned from experience. Then, as he jumped frantically to escape a sliding boulder, he had to grin at his own thought. They had learned, but not enough.

There was no doubt about it, a current of air came through the slide. They could feel it, cool and fresh, and redoubled their efforts.

Finally they had to slow down from sheer exhaustion.

"Take a break," Rick said huskily. "We'd be foolish to wear ourselves out."

"You're right." Scotty slumped down where he was and wiped his face. "That air current is getting stronger. We're making progress."

"Wish I knew toward what," Rick said.

"Air, anyway. And where there's a source of air is also daylight."

"I'd feel better if I could see some."

They rested in silence for five minutes by Rick's watch, then resumed, working as close to the top of the pile as they could get.

Scotty suddenly let out a yell, and Rick dodged to escape another rock, then leaped down as the whole pile crumbled. The rocks didn't fall far.

"Look," Scotty said breathlessly.

Rick turned on his own light to supplement the dim beam of Scotty's. Blackness yawned at the top of the slide!

Scotty was first through the hole, but Rick was right

behind him. They emerged in a continuation of the tunnel, but on a higher level. Their lights showed that the tunnel continued.

They followed it for perhaps fifty feet, and found themselves in a cross tunnel in which their tunnel ended.

Scotty looked at Rick in the beam of the flashlight. "We're somewhere," he said. "But where?"

Rick grinned. There was a definite breeze blowing, and he knew the outside and safety were not far away. "We're in the mine, under the same old hill. Soon as we find the source of that breeze, I'll identify our position within two feet."

Scotty returned the grin. "What are we waiting for? Let's go!"

CHAPTER XVIII

The First Fact

Rick said, "Hold it a minute. Which way do we go? If we assume the tunnel we came out of was fairly constant in direction, we should turn right to come out on the side of the hill where we saw the Frostola man a while ago. If we turn left, we go deeper into the hill."

Both boys saw the implication the moment the words left Rick's lips. "Right it is," Rick added quickly. "First thing we have to do is see if there really is a way out."

They turned right into the cross tunnel, and met the breeze head on. So long as they followed the direction of the breeze, they were approaching the outside air.

Within a hundred feet they saw a glimmer of daylight and broke into a run. The glimmer became an opening, irregular in shape, but obviously big enough for an entrance.

"We made it!" Rick exulted. "Let's get a good look at that sunshine!"

"Careful," Scotty cautioned. "We'll have to let our

eyes adjust fully or the glare will hurt. Besides, it may not be a good idea to go barging out into the open. Might be some ghosts hanging around."

"You're right. Anyway, let's take a brief look. What's blocking the opening?"

As they approached he saw that it was the trunk of a fallen tree, festooned with blackberry bushes. When they looked through the entrance, blinking in the light, they saw that the tree wasn't really a block, because there was plenty of room to crawl out of the tunnel.

"That trunk makes a mighty good shield," Scotty said thoughtfully. "Bet this entrance is invisible ten feet away, except from the air!"

"And I'll add my own bet, that the entrance is very close to where we met the Frostola man this morning, and that he wonders if we spotted it from the plane."

Scotty shook his head. "No betting on sure things. This explains the interest in the plane, all right. Stand by, old son. I'm going to make a quick recon and be sure the coast is clear."

"Okay. Eyes adjusted?"

"Enough." Scotty went through the entrance on hands and knees. Rick saw his legs as he stood up and surveyed the scene.

"Come on out," Scotty called. "We're alone."

Rick joined him. The fallen tree trunk came above their knees. As Scotty had said, it made an effective shield for the mine entrance.

Rick studied the entrance itself. Probably it had once been a regular timbered entrance, like the one

on the other side of the hill, but it had fallen in, the rocks wedging to form a low passage into the tunnel inside. The whole hillside was overgrown with brambles, down to the two-rut road below them, almost at the place where they had met the peddler.

"We were within fifty feet of this entrance," Rick said, "and never suspected it."

"The Frostola man knew it. Do you think he thought we knew it?"

"Possible, I suppose. I'm not so interested in what he thinks as I am in what he was doing here. Where would we have ended if we had taken the left-hand turn, do you suppose?"

"Why suppose? Unless you've had enough of mines for one day, we can go back in and find out."

"I've had enough, but not enough to miss a chance like this. My flashlight is still strong and it shouldn't take more than a few minutes."

"Then let's go. No telling when a spook may visit the mine from this end. Of course there's no telling about Uncle Frostola, either. He may be inside."

That hadn't occurred to Rick. He thought it over, then shrugged. "We might as well take the chance. If he is inside, that proves something, and we're two to his one. Besides, it's late, and any sensible man is eating his supper. Come on."

He led the way back into the cave, but because of the peddler's possible presence, he wasn't as headlong in his traversing of the tunnel as he might otherwise have been.

They passed the side tunnel from which they had

emerged a short time before and entered entirely new territory. It wasn't unlike the rest of the mine, consisting of a main bore with some alcoves indicating either deviations of the ore vein or niches cut to allow ore carts to pass.

Walking rapidly, but alert for either sound or light, they traveled through the tunnel at a good speed.

"We've been walking quite a while," Rick said finally. "How long do you suppose this shaft is?"

Scotty thought it over. "It can't be any longer than the hill is wide, because we're traveling through the hill. It must be about the same length as the lower tunnel."

"Why two tunnels?" Rick asked. "I doubt that there were two veins of ore."

Scotty reminded him of the good ore they had seen in the ceiling of the lower tunnel. "There might have been just one vein, about two tunnels high. They were limited to pick and shovel for tools in those days, remember, maybe with a little powder for blasting. It would have been move convenient to work within range of tools like shovel and pick. So the ceiling is as high as a man with a pick can reach, and as wide as the ore vein was wide. That's a little confused, but I'm sure you follow me."

"Sounds reasonable," Rick agreed. "Only this tunnel can't go on much farther, or we'll be in the middle of the picnic— Hey! Scotty, take a look!"

Ahead in the tunnel was a box, and on the box was metal that reflected the flashlight's beam. In a second the boys stood over it.

Rick's heart pounded rapidly. Here was the proof. Here was Missing Fact Number One. Here was verification of at least part of their speculation.

An eight-millimeter motion-picture projector!

Rick motioned to the front of the machine with a trembling hand. "Look, there's a film in place, and it's a continuous loop. Once it's threaded it will repeat over and over unless cut off."

Scotty was probing into the box. "Batteries. Two of them, twelve volts each. And I'll bet the motor in the projector is designed to operate on twelve volts. There's even a hydrometer for testing the batteries."

Rick took a look. As Scotty had said, there were two automobile batteries, their cables running up into the projector.

"Simple enough," he commented. "Let's see what's on the film."

He opened the film gate gingerly and removed the film from the sprockets. Then, without disengaging the spindles, he put the flashlight behind it and bent close. The eight-millimeter frames were pretty small, but not so small that he and Scotty couldn't make out the image.

The scene had been shot against a black background, that was clear. Only the central figure was illuminated, the figure of a Union cavalry officer.

"Meet the Blue Ghost," Rick said happily.

"Delighted," Scotty said emphatically. "I suppose I shouldn't admit it, but deep down, way back in the primitive part of my thick head, I was sometimes guilty of wondering about this creature."

Rick held out his hand. "Shake hands with another superstitious chucklehead. So was I. But let it be said to our credit that neither of us was so scared we were afraid to move."

He chuckled. "Of course there were times when I just had to keep my poor icy spine from freezing solid." He replaced the film on the sprockets and closed the gate with great care.

"The projector is aimed at the wall," Scotty pointed out, "right at the end of the tunnel. "How does it get to where people can see it?"

"There has to be a way," Rick said. He swept the beam of his light around and it steadied on an iron pipe. "Hey, look!"

The pipe entered through the end of the tunnel, threaded into a right-angle pipe fitting, and disappeared into the tunnel floor!

"So that's how the water comes out of the hillside!" Rick exclaimed. "The well was originally driven straight down, as a well should be, and the horizontal pipe was added later. It misses the lower tunnel by about six feet."

"That's not the only interesting thing about this end of the tunnel," Scotty added. "This whole end is artificial, including part of the roof over the well. Take a look. It's mortarless stonework. No wonder the face was so seamed on the outside. Whoever did this was a terrific mason, because he selected rocks—probably from the mine itself—that duplicated the contour of the hill. But why go to all the trouble? That's what puzzles me."

"Maybe this is the reason," Rick said. He pointed to rusty iron projecting from the wall. The iron supported a block of stone, by means of an iron pin that ran from the bottom of the stone through a hole in the iron piece projecting from the wall. At the top of the stone was a similar arrangement. It was an elementary but effective hinge, long ago rusted to disuse.

Rick studied the wall, and directly in front of the projector lens he found another of the same arrangements, but with a difference. This one was modern, and it had been painted to prevent rusting. There were traces of graphite or graphite grease where the pins went through the iron supports.

Clearly, the block of stone supported by the iron pins formed a porthole, the pins allowing the stone to be swung inward. The old, rusted one had been unused for decades, but the port in front of the projector had been repaired and lubricated. The comparison between the two gave Rick his clue.

"This is a sniper nest built by the Confederates," he guessed. "Probably to protect the mine. The upper mine tunnel opened out here, too, and then war came and the people sealed the upper one to give protection to the troops working the lower level. That means the upper level was dug out first."

"It's speculation, but it sounds good," Scotty agreed. "These are gun ports, very likely. I don't know what other purpose they could have served."

Later they learned from Dr. Miller that the ports had also served as ventilation for slaves using the

mine to hide on their way North to freedom, but that was after the North had the area partly in its grip. They also found that from these same ports the Lansdale brothers had fired the shots that killed Captain Seth Costin, for the legend was almost entirely true.

"We open this port in front of the machine and we'll be only inches above the pool," Rick said. "Look at the location of the pipe. So, to produce the ghost, the Frostola man slid open the port, dropped a piece of dry ice . . ."

"All properly sized to give the right amount of mist for the right time," Scotty added.

". . . and turned on the machine. With only the small port for the sound to go through, it wouldn't be audible to anyone in the picnic grounds."

Scotty agreed. "And since the projector is so close to the mist we wouldn't see a beam. That lens must have a mighty wide angle, by the way. What's more, the projector must be slid closer to the opening when in use."

"True. You know, in a way we were unlucky. If we had chanced to climb a tree when the ghost was actually appearing, we would have seen the projection lens through the mist as a bright spot of light, and that would have given the show away before this. But because of the angle, only someone in a tree could see it."

Rick shook his head in admiration. "Rear-screen projection with a wide-angle lens. That's really using movie technique for all it's worth."

"Rear-screen projection?" Scotty queried.

"Sure. Movies and TV use it all the time. When the hero is supposed to be watching dinosaurs fighting it out, he's actually standing in front of a big screen of special plastic or ground glass, with the picture projected on it from behind. The mist acted as the screen, so we saw the image but not the projector beam. That's rear-screen projection."

"I know how it works," Scotty said. "You can tell in a movie when they use it, because the definition of the background isn't as sharp as real photography, but I didn't know the name of the process."

Scotty turned and studied the location of the port. "He must place the projector right on the tunnel floor, tilted upward to shine through the port. That's why the ghost was so tall. It hit the mist at an angle."

Rick bent over the port. "Not hard to smack us in the eyes with methyl chloride from here, either. There we were, on our knees, faces in good range. And I'll bet he chuckled while he was doing it. Simple weapon, too. A water pistol. Or any plastic squirt bottle."

He tugged on the port and it failed to move. Something wrong here. He studied it carefully and saw the reason. It had to be slid sideways for a quarter of an inch, a safety-lock feature. No wonder their examination of the rock face outside had shown nothing.

"Open it," Scotty said. "Let's look."

Rick did so, and instantly closed it partly shut again. "Get down here and look," he commanded.

He had seen at once what had happened during their absence and his quick mind had caused him to react.

There were men outside, several of them, and they were watching a small power scoop move into position in front of the lower mine entrance. Among them were Dr. Miller and Belsely. Away from the group, sitting on his tricycle scooter, was the Frostola man!

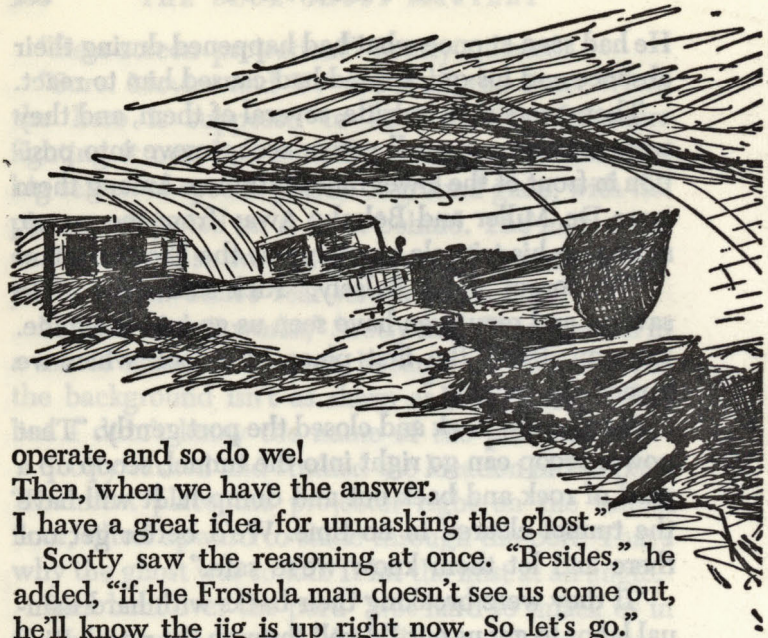
"We forgot about Belsely," Rick said softly. "He saw us, and may even have seen us go into the mine. Anyway, that's the first place he'd look when we turned up missing."

Scotty drew back and closed the port gently. "That power scoop can go right into the tunnel, scoop up a yard of rock and back out and dump it. It will have the tunnel cleared in no time. We'd better get out there and let them know we're safe."

"If they were breaking their backs with hard manual labor to get us out I'd yell through the port," Rick said gleefully. "But they aren't. So we'll let the scoop operate. It will remove that stuff in an hour. And when they open up, they'll find us."

Scotty looked at him suspiciously. "The tone of voice tells me you're whomping up something that will make someone unhappy. What is it?"

"Well, if we rush out and tell the world about this, everyone will know the ghost is a fake. But that won't help us much, because we'll still need to know the answer to the biggest question of all. Why do this? So we go back, use the time covering up the break between the tunnels so no one will suspect we know, and let ourselves be rescued. The ghost continues to



operate, and so do we!
Then, when we have the answer,
I have a great idea for unmasking the ghost."

Scotty saw the reasoning at once. "Besides," he added, "if the Frostola man doesn't see us come out, he'll know the jig is up right now. So let's go."

They checked carefully to be sure no trace of their presence remained, then hurried back to the lower tunnel. Working carefully, they fitted rocks into the opening until a casual survey by flashlight would not reveal that the block between the tunnels had been removed. Then they spent the remaining time clearing more rocks from the original rockfall that had sealed them in.

When the power scoop finally broke through, the glare of headlights, turned on when darkness fell, revealed two dirty, disheveled, exhausted young men who were too fatigued for anything but a quick bath, a meal, and bed.

CHAPTER XIX

The Final Fact

Rick and Scotty slept late the following morning and were awakened for brunch by Dr. Miller. The boys took advantage of the few moments alone with the scientist to give him the complete story of their adventure in the tunnel, after which they pledged him to secrecy.

"It's one thing to tell people a ghost is a fake," Rick explained. "It's another to dramatize it. I'm working on an idea that may do it, but only if we keep quiet and make our plans carefully."

"I'll keep the secret," the scientist assured him. "And I won't even scold you for going into an obviously unsafe mine because I hope the hours before you found your way out were lesson enough. By the way, Belsely wants to talk with you. Call him when you've eaten."

"Yes, sir. And thank you."

During their combination lunch and breakfast, the boys had to put up with comments from Jan and Barby. Dr. Miller had refrained from scolding them

for foolhardiness, but the girls were not so reticent. The boys bore it stoically, but Rick resolved not to divulge their secret to Barby at any cost. Let her get a shock with the rest of the ghost fanciers.

Belsely was out when they phoned, but he called back a short time later. "Meet me at the edge of the orchard," he requested. "Got to talk with you."

The boys excused themselves and went to keep the rendezvous.

"Didn't get a chance to talk with you last night," the farmer said. "Didn't you wonder a little at how fast rescue got to you?"

"We did at first," Rick explained. "Then we realized you had seen us. We waved at you and you waved back. So we guessed the mine was the first place you'd look."

"True, true. But that's only part of the story. I saw you go in the mine, you see. Then I went back to fence makin'. Pretty soon I heard the put-put of that scooter and along came the ice-cream man. He parked the scooter and sort of sniffed around here and there, and then he walked over and went into the mine. I did some sneakin' myself, to where I could see what he was doin'. He was looking at footprints, like he was an injun trackin' the hero on a Western TV show."

"Those must have been his tracks we saw on the way in," Scotty interjected. "Big feet, which he has, and a reason for wanting to know how far into the mine we'd gone the first time add up to Mr. Frostola."

"I suppose. Well, he went in a ways and stayed a bit, then he came out and went back to his scooter

and just sat on it. Pretty soon there was a rumble, and a cloud of dust came pourin' out of the mine. I knew right away you was trapped in there. Had to be, from the noise. Don't know how he did it, though. There was no explosion."

Rick explained about the rotted timbers. "He could have done a little pushing, or even cutting into the rotten wood with a knife. That would have done it. Maybe he pushed until the beams started to crack and then hurried out, only it took a few minutes for the beam to let go all the way."

"That could have been it. Well, I wandered over and asked what the dust was, and he said cool as you please that he didn't know. Probably a cave-in inside somewhere. Well, I put on an act about you two poor lads goin' in and he pretended to get excited, too. We went in, and I tell you it looked bad."

"Looked bad from our side, too," Rick said.

"I believe it. It was a job for machinery, all right. I hurried to the house and told Dr. Miller, and we phoned town, but the man with the scoop was out on a job. The Frostola man was still hangin' around when I started for town, and he hadn't moved when I got back. I did nothin' about him because I wanted to talk to you first. Took some time for the scoop to get there, but it certainly did the job."

"And we're mighty grateful," Rick told the farmer. Scotty echoed him.

"By the way, Mr. Belsely, was anything ever said about a second tunnel in the mine?" Rick asked.

The farmer considered. "Seems to me there was

some mention about such a second tunnel, back when I was a boy, but I never heard about it since. I was born and brought up in this town, and I've never seen a sign of one. Course that doesn't mean there never was, because it might have fallen in."

Rick made a quick decision. "It didn't," he stated. He went on to tell Belsely what had happened the day before, pledging him to quiet for a few days at least to give them a chance to solve the puzzle that remained.

The farmer was delighted. "This will give me a tale to tell from now on! Once you say I'm free to talk, that is. Well, whaddaya know! That spring pipe has been there since Hector was a pup, and no one ever wondered about why it went in the hill sideways until you came along! Of course Collins must have known —him and Hilleboe, because they were the ones who replaced the pipe a few years back."

Rick remembered that Dr. Miller had spoken of the pipe being replaced. If Collins and Hilleboe had put in the new pipe, they may have driven it into the hill as Dr. Miller had said, but they had most certainly connected it with the vertical pipe inside the tunnel.

"Likely," Belsely agreed. "One more thing. We got a daylight ghost today. Saw him arrive by car about half an hour ago. He went up to the cornfield with a suitcase of some kind. Thought you'd like to know."

They were delighted to know! The chance to see someone operating by daylight was too good to miss. They said a quick farewell to Belsely and hurried off across the field.

There was no one in sight as they crossed the picnic grounds, but when they climbed to the top of the hill and stood on the edge of the cornfield, they could see a man in khaki clothes bending over something between the rows of corn plants.

"Just what the ghosts were doing," Rick exclaimed. "Let's hurry and find out what he's up to!"

They walked swiftly down the rows of corn, making no attempt at concealment. This was a frontal attack. The stranger saw them coming and stood up.

Rick looked him over. The man was about forty, tanned and clean-shaven, with horn-rimmed glasses. Not at all a ghostly type.

The boys walked right up to the man and gave him a cordial hello, which the stranger returned.

"We couldn't help being curious," Rick said. "Do you mind if we watch?"

"Not at all." He indicated the open suitcase at his feet. It contained a built-in instrument with a meter and earphones. There was also a tubular attachment on the end of a thick wire.

Rick recognized it at once and a thrill shot through him. The stranger was somehow connected with the mystery.

"Isn't that a Geiger tube?" he asked.

The stranger answered casually, "That's what it is. This is called a survey meter. Most people know it as a Geiger counter. It's very sensitive."

Rick knew better, but he wanted to probe for more information. "Are you in Civil Defense by any chance?" he asked.

"Nope. I'm a geologist. My outfit is making a routine survey of the area for radioactive ores. We don't expect to find any, but there was a discovery in Maryland recently and we don't want to overlook any bets."

Rick was sure now that no bets were being overlooked. Any geologist would eliminate the area simply on the basis of its rock formations with no need of making a field survey.

He operated largely by instinct when there was a need, and this was clearly the right occasion. The man looked clean cut and respectable, and the daylight operation separated him from the nightly prowlers.

"You might find some Janigite around here," Rick said casually, and watched sharply for the reaction.

"Possibly. Saw an interesting sample of it yesterday." The stranger was offhand in his reply, but his eyes twinkled behind the glasses.

"So did we. It was wrapped in a cement bag."

The response was quick. The stranger held out his hand. "I'm Roger Bennett from the Atomic Energy Commission. You're the boys who notified JANIG about the cement bags."

Rick and Scotty identified themselves, and Bennett nodded. "I know John Gordon of the Spindrift staff. We worked together on a test project a few years ago. Now, what's the story?"

The boys told him what they knew, ending with yesterday's discovery.

The AEC man nodded. "This field is 'hot,' did you

know that? It's obvious that powdered carnotite was spread here before the corn was planted. And from your story, it was spread in the field across the creek, too."

Ghosts with a cart had marched up and down the fields, hunting for the ghostly dead . . . the image flashed through Rick's mind and he exclaimed, "The cart! That was why the ghosts needed the cart! They were lugging bags of powdered carnotite and spreading it around the fields when Belsely saw them!"

"You've hit it," Scotty agreed.

Rick explained to Bennett about the ghosts and the cart, and then added Belsely's reports on the times when two or three ghosts had walked the fields without a cart. "Scotty and I saw three of them once, and it's a cinch they were using a survey meter to check the ground for radioactivity. But why? That's what has us going around in ghastly, ghostly circles. Why spread carnotite and then come back to measure it?"

Bennett smiled. "I think I know, but I'd like to see this mine of yours. Can it be arranged?"

Scotty said swiftly, "I'd better act as a lookout to intercept the Frostola man if he comes. I'll delay him while you two go into the mine." He was gone at a ground-eating pace.

Rick led the AEC man to the hidden mine entrance. "I don't have a flashlight with me."

"No need. What we want will be right at the entrance, I'm sure."

They crawled in on hands and knees, the AEC man

pushing his bag before him. Inside, he looked around and selected several small pieces of rock.

"We'll check the samples, but it's just a formality. I recognize this stuff. It's carnotite. You can see the yellow streaks clearly. That's the uranium color. Of course the rock is mostly gray, so that's the color of the powdered ore."

"Then the mine really contains radioactive ore?" Rick asked eagerly.

"Only what was put here, I'm afraid."

With this cryptic comment Bennett opened his case and checked the samples. Rick watched the meter climb. They were radioactive, all right, but of low ore level, not at all dangerous.

"We'd better get out of here," Bennett said. "I'd rather not be discovered at this point. When your friend Scott comes back I'll tell you what has happened."

Scotty rejoined them as they reached the cornfield again. They walked with Bennett to his car, and listened to an explanation that made everything clear.

"This is a game as old as mining," Bennett told them. "It has happened before, and it will happen again. Uranium is the treasure metal now, where gold used to be. So the game uses uranium. The game is known as salting."

"Salting?" Scotty asked. "I've heard it in connection with gold mines, but I can't remember exactly what it means."

"It means putting evidence of high-grade ore in a likely place, but one which actually contains no real pay dirt. For instance, in country where gold may be found, the technique for salting used to be firing gold nuggets into the ground with a shotgun, by replacing the buckshot with the nuggets. Then, when the victim was allowed to try panning gold for himself, he'd come up with the nuggets and think he was getting natural gold."

"And in this case, powdered carnotite was used in the fields, and chunks were put in the mine, to make victims think uranium was present," Rick added. He could see the picture pretty clearly now. "The carnotite was put in and then the field was planted with corn to make it look as innocent and natural as possible, I suppose."

"That's how I figure it. There's no uranium around here, except for the very small percentage that one can often find associated with some varieties of lead. We'll find that someone has been pulling a very cute confidence game, bringing clients here by night, showing them the radioactivity—by letting them hear the clicks in the earphone of a counter, probably—and then selling them either shares in a mine or pieces of property."

"And using the ghost to scare the townspeople away so there would be no interference," Rick finished. "But how can we prove all this?"

"You won't have to. I brought a man with me, and dropped him off in town. His name is Joe Taylor, and he's an FBI agent."

"The FBI?" Scotty looked puzzled. "But bunco games or con games, whatever you call them, aren't a federal offense! How does the FBI get in on it?"

"Because the carnotite was federal property. It was stolen from a loading platform at our Grand Junction facility. We know this, because there is no record of any transaction, and we can identify the source by the chemical composition of the sample."

"But how could anyone steal stuff from AEC?" Rick asked.

"Easily, in this case. There is no purpose in protecting ore with the same security we give the processed stages, like green salt, for example. No one could possibly steal enough ore to do any good, because it takes many tons to produce even a gram of uranium. Ore moves by carloads, on normal railroad or truck bills of lading, from private companies who mine it. No security is required, you see, because no one has the capability of getting out the metal even if they could steal thousands of tons of ore."

Rick understood this. He had seen the plant at Oak Ridge where uranium was extracted by the gas diffusion method. The plant covered acres. Only a government could afford such a facility.

"But couldn't the carnotite have been stolen from a privately owned mine?" he asked.

"Possibly, but we will assume it was in our hands when it was taken. This is because we want to discourage this kind of thing, and the FBI taking action is very discouraging to thieves."

The boys appreciated this viewpoint. "I hope the

FBI doesn't interfere with Rick's plan for exposing the ghost," Scotty said.

"I don't think you'll find Taylor hard to persuade. I'll suggest he stop by and hear your story. It will help him. Then you can outline your own plans."

"We'll be waiting," Rick assured the AEC expert. "Before you go, what's your idea about the changing number of ghosts? Was that when the clients were brought to see the Geiger counter work?"

"That would be my guess," Bennett agreed. "You'll probably find that the ghost took them on a conducted survey of the mine and the fields to show them what valuable property he was offering for sale —or for shares in a mine."

Scotty objected, "But the ghost wore the luminous blue head. Any clients would think that was mighty peculiar, to put it mildly, unless they knew they were being parties to something illegal."

Bennett chuckled. "It's one of the key factors in a really big con game to make the client think he is getting something for nothing, or maybe even a shade outside the law. Confidence men say that everyone has a 'little larceny in his soul.' I'm sure that's not true, but enough people do so that they can be swindled by an illegal offer."

Rick snapped his fingers. "Dr. Miller's property, and the fact that Hilleboe owned only part of the mine! That's the reason for the ghosts that walked by night. It has to be! The swindlers would tell their clients only part of the land was available and they needed funds to buy the rest of it—but the inspec-

tion had to be held by night to keep the owner from suspecting he had a uranium mine on his property."

Bennett asked, "Was Dr. Miller actually approached with an offer to buy?"

"Yes," Scotty replied. "It was a good offer, too. That must mean the swindlers were doing a good business and needed more land to sell."

"Not necessarily. They probably wanted the Miller property more as a safety factor than anything else, in case someone got wind of what was going on and tried to horn in. They probably didn't actually sell land, only speculative shares in a mine to be developed. That's the usual technique. The secrecy and mystery, and having a phony ghost for a guide, were just added elements of drama to help with the selling. The clients thought they were in on a great big secret."

Rick grinned. "They were. We've just managed to untangle it, with your help."

"Delighted," Bennett said. "But you'll find Taylor much more of an expert than I. See you later, boys, I'm sure."

They watched as the AEC man drove off. "I'm pretty sure we have the answers," Rick said happily. "Hilleboe probably is the boss, since he owns the property, but Collins is in on it to some extent because he knew about the upper mine tunnel, and acted as agent for Hilleboe. And our pal the Frostola man is in it up to his hip pockets."

"He's the ghost," Scotty agreed. "Both in the tunnel when the machine is run, and at night when the

ghost walks. At least he is part of the time. Of course there's no reason why someone else couldn't be the ghost, too, maybe two or three different people."

"Someone else was the ghost the first night," Rick remembered, "because the Frostola man was watching."

"Good thing we don't have to prove any of this," Scotty concluded. "The FBI is on the job. They'll get the proof."

"But we're the ones who'll bury the ghost for good," Rick promised.

CHAPTER XX

Death of a Ghost

DR. MILLER planned a large cook-out and picnic party in the mine area, and he issued invitations to people from the town of Lansdale, to the staff of Spindrift Island's scientific foundation, to Mr. Bennett of the AEC, and to a number of folks who preferred for reasons of their own to remain anonymous for the time being.

The reason, Dr. Miller said, was to get all his friends together for one big shindig before he and his family returned to Spindrift Island where a new project was waiting.

Even Jan and Barby knew no other reason than this.

Meanwhile, the boys were busy preparing to "bury the ghost for good." What made the plan difficult was that it had to be done publicly, and in such a way that it wouldn't interfere with police activities.

The boys met with Taylor, the FBI agent. He was a good-natured young man who might have been a lawyer, but under the attractive grin and ready

chuckle, Rick could sense that Taylor could be a very tough man indeed if need be. The agent listened to their plans and laughed outright.

"I like it," he said. "We must do this, if only for the effect on the Frostola man when he sees what has happened. It's turning the tables on that joker, and he deserves it."

Rick sensed more than met the ear in that statement. "You know something about him?" he asked.

"Quite a bit. He's not exactly Public Enemy Number One, or even Number Fifty, but he's well known to the police of most large cities. He specializes in confidence games with a technical angle. He's quite original. You can bet he dreamed this whole thing up and planned it down to the last detail, then sold the others on it. I don't know how he met Hilleboe, but we'll find out. Of course he met Collins through Hilleboe."

"Does the Frostola company know he exists?"

"Sure. He wouldn't slip on a detail like that. He got the job without difficulty, since the route was vacant. If it hadn't been vacant, he'd have worked out some other kind of cover."

Rick made a telephone call to a friend in New York, and as a consequence had to fly to Washington National Airport in two days to pick up a small package.

Mr. Belsely let it be known around town that Dr. Miller didn't really want to hold the party at the mine area because of the ghost, but had no other place large enough—and he had to give the party

for professional reasons; his scientific friends had long wanted to see his Virginia home. The farmer made sure the Frostola man heard the story.

There was only one final step necessary on the day of the big event. With Belsely watching one road and Scotty watching the other, Rick went into the upper mine tunnel for the last time. He had with him equipment and a specially made item that was essential to his plans. He worked swiftly, sure that the Frostola man wouldn't notice the slight change, which involved only a foot of film on the continuous strip.

He finished and called Belsely and Scotty off their posts. Now all was in readiness.

There were gallons of potato salad and coleslaw, mountains of rolls, barrels of punch, and enough hot dogs to feed a small army. Wood was piled for the fires, paper plates were stacked high. All was in readiness.

Rick flew again to Washington and made connections with the plane that brought his parents and Julius Weiss, the little mathematician. The other Spindrifters were out of town, so couldn't come.

It was a gala occasion, enjoyed by everyone. Rick ate half a dozen hot dogs himself, while Scotty maintained his reputation as a good trencherman with two on top of that. They consumed salad until the bursting point was near, and so was darkness.

Then Rick wandered casually over to a parked car where one man, replete with picnic chow, was listening to his radio.

It wasn't a broadcast receiver, however. The man was a lieutenant of the Virginia State Police. His car was radio equipped, although not identified as a police car. It kept him in touch with his men.

"Your boy went into the mine a few minutes ago," he reported.

Rick breathed a sigh of relief. Now, if the ghost producer didn't examine things too closely . . . but he wouldn't. Everything looked normal, and the extra film wasn't prominent.

It was almost nine o'clock.

Rick found Scotty. "Let's get grandstand seats."

"Okay."

Barby, Jan, and the Millers had a table directly under the tree in which the boys had waited in vain for the Blue Ghost, and had hidden from the night prowlers. This was no accident. Rick's mother and father were with the group. Weiss was off at another table with Bennett of the AEC, deep in a discussion of some obscure point of nuclear physics.

A car drove up and Rick waited to see who emerged. One person who was missing had arrived just in time. Rick walked over and told the FBI agent to get a good location from which to watch the show.

"Just got in from Washington," Taylor said. "We picked up Hilleboe and three associates. They talked freely when they saw we had 'em cold. Been actually selling pieces of the land, through Collins, at fantastic prices. We'll pick up Collins on the way back tonight."

Rick saw him to a good location and rejoined

Scotty. They hurriedly told the folks at the table that they wanted grandstand seats and went up into the tree. Besides having a good seat, Rick also wanted to see if he was correct about being able to see the bright projector lens from the tree.

Now that they knew what to look for, it was absurdly simple. They couldn't see the port open, but they saw the white flash of dry ice as it dropped from the port into the pool.

The mist rose.

The party group was silent now. Only a very few knew what the outcome would be; most knew only that the Blue Ghost was about to appear.

The mist thickened, expanded.

The Blue Ghost materialized. He held out his hands to an invisible loved one. He looked appealing.

He recoiled, then put hands to his chest. They came away bloody. He stretched them out . . .

And then a new sequence materialized in the mist, a sequence of words in stark red against the icy white of the background.

BE PREPARED!
BUY
BLUE GHOST
HEALTH INSURANCE

For a long breath there was shocked silence, then the crowd below dissolved into laughter.

"Let's go," Rick shouted.

He would have given much to see Barby's expression, but time was running out and he and Scotty

had ground to cover. They dropped from the tree, scrambled up the hill past where the white mist was fading, and dashed across the cornfield.

"Hurry!" Scotty exclaimed.

"I'm hurrying," Rick assured him, but made his legs go faster.

They went across the hilltop with great strides, broke into the open beyond the cornfield, dodged thorns, and panted to a stop just above the opening of the second tunnel.

The fast sprint had gotten them there in time.

The Frostola man spurted from the tunnel as though a real ghost was after him.

Four state troopers grabbed him so fast that his legs continued to make running motions even after his feet were lifted off the ground.

Rick caught a glimpse of blue light from the corner of his eye and whirled to see the Blue Ghost approaching! For a moment he thought a real ghost had somehow appeared to be in on the capture of the phony one, then at close range he saw that the ghostly head was nothing more than a transparent plastic head of the kind used to display men's hats.

The apparition walked up to the speechless Frostola man and said calmly, "Boo!"

Taylor, the FBI agent, removed the apparatus from his head; Rick recognized him in the blue glow. "We found your other head underneath the ice cream in your scooter," he said conversationally. "In the false bottom. We also found your Geiger counter. Any comments?"

The Frostola man had recovered somewhat from the shock of his capture.

"What can I say?" he demanded. "When I saw that wordage on the mist, I knew someone was onto the act. I only delayed long enough to read it—backward—from where I was. Then I got out and ran into troopers. All right. You found the secret of the ghost, and that I have a Geiger counter. So what? Practical jokes aren't illegal, and anyone can own a survey meter."

"But selling shares in a nonexistent mine with intent to defraud is quite a different matter," the agent said. "We've been collecting evidence for a few days, including some from clients of yours who were interested in knowing the field had been salted. And we've picked up Collins and Hilleboe."

The Frostola man sighed. "Well, it was good while it lasted. I suspected things were getting risky when those two kids charged into the mist, but I hoped maybe the cold spray had cooled them down a little. When it didn't, I tried to scare them off by trapping them in the mine. No intent to harm, either. I knew they'd be dug out in short order."

"We were," Rick agreed. "Only while the rescuers were digging in, we were busy finding the upper tunnel. After that, it was easy."

"I saw the rescue," the Frostola man said. "You came out the same way you went in. That fooled me completely; I just figured you hadn't gone beyond the pile of rocks between the tunnels."

A trooper sergeant pointed to the police car wait-

ing on the dirt road. "Come on. We'll take a ride to town and get you booked. Don't worry about your scooter. It will be taken care of."

"Eat all the ice cream you want," the Frostola man said grandly. "Be my guests. I won't be needing it."

"Not for some years," Taylor agreed. "Come on, lads. Let's get back to the picnic."

"We're with you," Rick said. "Lead the way." He chuckled suddenly. "It was a pretty good effect, wasn't it? The lab did a good job, and the Frostola man didn't see that a new chunk had been spliced in."

"A very good effect," Scotty agreed. "Only stand by for misery and woe. Barby and Jan won't like this! After all, we destroyed a historic romance."

The picnic crowd was eating again when the boys returned. They located the family and Rick strained to see the girls' faces, but it was too dark.

Barby's voice said sternly, "Is that you, Rick Brant?"

He admitted it, rather meekly. "Uh-uh."

"Rick Brant! You knew all the time . . . I mean, while Jan and I were . . ."

Barby's voice was trembling. He thought she was in tears. He hoped not; she shouldn't take legends so seriously . . .

Agent Taylor joined the group and chuckled. "You should have seen that Frostola man come out of the tunnel! I guess that final commercial shocked him silly."

"He wasn't the only one," Barby said swiftly, and

to Rick's amazement she and Jan Miller burst into peals of laughter.

This wasn't the reaction Rick had expected. "But the romance," he said doubtfully. "I mean, you should be brokenhearted . . ."

"I'll never understand girls," Scotty said darkly.

"It was like sitting through the same movie too many times," Barby explained.

Jan added, "Really, we were getting a little bored with the same act. If the ghost had only changed his routine a little . . ."

There was real pride in Barby's voice as she declared, "And how do you get rid of a boring ghost? You get my brother Rick to turn him into a commercial. Rick Brant's Sponsored Spooks!"

Rick was so relieved at Barby's reaction that he let her have the last word. Besides, there were new events to think about, for Hartson Brant had brought word of a new project the Spindrift Foundation had agreed to undertake, one that would shake the very earth to its depths, and one in which Rick Brant and Scotty would play a major part.

Cultivated Land
Wooded Land
Tidal Flats
CLIFF
CLEARING
New Jersey Coast

oat Dock
NORTH WING
HOUSE
SOUTH WING
Farm
Landing Strip
Apple Orchard
LABORATORIES
CLIFF
SPINDRIFT ISLAND

THE
BLUE
GHOST
MYSTERY
JOHN
BLAINE
GROSSET
& DUNLAP